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II. TRILOBITA

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II.—SUBJECT INDEX

GENERAL LITERATURE AND HISTORY

General works.—Treatise, Chernysheva et al.; Ontogeny and cephalic segmentation of trilobites, Hupé (2); Scutellulidae, Šnajdr; Middle Ordovician Asaphidae of Oslo, Henningsmoen; Trilobites of S.W. England, Stubblefield; Origin of Cambrian faunas, Šidny (2); Palaeozoic of E. Kazakhstan, Borukaev et al.; Geology of Norway, Høltedahl; Cambrian stratigraphy of China, Lu; Ordovician stratigraphy of China, Chang; Palaeozoic evolution of Portugal, Teixeira; Precambrian & Cambrian of N.E. Siberia, Tkachenko.

Popular works.—Silicified trilobites from Virginia, Whittington (2); Encyclopedia article, Whittington (3).

Textbooks.—Palaeontology, Ehrenberg; Invertebrate palaeontology, Easton, Müller; Stratigraphical palaeontology, H. & G. Termier.

Bibliography.—Relative dates of Barrande 1846 and Beyrich 1846 discussed, Whittard.

Abstracts.—Nelson, Palmer (2), Pillet (1).

Reviews.—Trilobite studies, Hupé (1), Kobayashi (5); Summaries and reviews of several articles, Erben.

Preservation.—Importance of tectonic deformation of fossils stressed, method of obtaining original dimensions outlined, Henningsmoen.

Museum Collections.—Hunton fossils (including L. Devonian trilobites) of Oklahoma, Amsden (1), (2); Types etc. in Canberra, Crespin.

Revision of faunas.—Revision of Middle Ordovician Asaphids listed by Brögger 1884, 1887, Høltedahl 1909, Sterner 1953, Henningsmoen; Revision of Middle Cambrian fauna from Cerrillo El Solitario (Argentina) with discussion of generic assignments of Rusconi 1950-52, Poulsen (2).

Revision of nomenclature.—*Maja* Lomovikaya 1955 renamed *Erdelia*, *Pagetina* Lermontova 1940 renamed *Neopagetina*, Chernysheva et al.

Designation of type species.—*Goyocia* Rusconi 1950—designation of *G. tellecheai* R., Poulsen (2).

Selection of neotypes.—*Bojoscutellum paliferum* (Beyrich), *Paralejurus campanifer* (B.), *Spiniscutellum umbelliferum* (B.), *Thysanopeltis speciosa* (Hawle & Corda), *Šnajdr*; *Granularia protolenorum* Lermontova, *Suvorova*; *Ogygiocaris sarsi* Angelin, *Henningsmoen*; *Phylloaspis raniceps* Richter 1863, Alberti.

Selection of lectotypes.—*Ampyzella edgelli* (Reed), *Broeggerolithus globiceps* (Bancroft), *B. harnagensis* (B.), *B. longiceps* (B.), *Onnia* f. *cobboldi* (B.), *O. gracilis* (B.), *Smeathenia smeathenensis* (B.), Dean (1); "*Asophus*" *nobilis* Barrande, *Dicranaspis decacantha* (Angelin), *Dindymene ornata* Linnarsson, *Eodindymene pulchra* (Olin), *Leonaspis centrina* (Dalman), *Opsimasophus latus* (A.), *Pseudosphaerocochus octacanthus* (A.), *Symphysurus superstes* O., Kiellán (1); *Australoscutura gardneri* (Mitchell), Amos et al.; *Bathyriscus robustus* Lermontova, *Erbia granulosa* L., *Namanoia namanensis* L., *Paramimacra siberica* L., *Suvorova*; *Breviscutellum angusticeps* (Barrande), *B. inermis* (B.), *Bronteus asperulus* H. & C., *B. aulicus* H. & C., *B. berkeleyanus* H. & C., *B. carinatus* H. & C., *B. gigas* H. & C., *B. intermedius* H. & C., *B. pulcher* H. & C., *B. scharyi* B., *B. sculptus* H. & C., *B. eparus* H. & C., *B. subtriangularis* H. & C., *Cornuscutellum rhinoceros* (B.), *Decoroscutellum haidingeri* (B.), *D. uvalicum* (Weber), *Kolihapeltis brevifrons* (B.), *K. parabolina* (B.), *Kosocoeptis partechi* (B.), *Metascutellum pustulatum* (B.), *Microscutellum hawlei* (B.), *M. tenellum* (B.), *M. zippei* (B.), *Octobronteus khodavitchi* W., *Paralejurus brongniarti* (B.), *P. dormitzi* (B.), *Planiscutellum planum* (H. & C.), *Platyscutellum spiniferum* (B.), *P. viator* (B.), *Poroscutellum porosum* (B.), *Protoscutellum simulans* (B.), *Scabriscutellum caelebs* (B.), *S. furciferum* (H. & C.), *S. oblongum* (H. & C.), *Scutellum edwardsi* (B.), "*S.*" *schöbli* (Novák), "*S.*" *sieberi* (H. & C.), Šnajdr; *Cordania becrastensis* Clarke, *C. cyclurus* (Hall & Clarke), *Myrocephala varicella* (H. & C.), Whittington (1); *Dalmanites vulgaris* (Salter), Dean (4); *Denemarkia frontalis* (Hawle & Corda), *Proetus neglectus* Barrande, *P. signatus* Lindström, Pfißl; *Dunderbergia nitida* (Hall & Whitfield), *Pseudagnostus* ? *acutus* (Kobayashi), Palmer (1); *Griffithides* (Bollandia) *rozlozniki* Rakusz, *Phillipsia collinsi* Mitchell, Bouček & Pfißl; *Harpes reticulatus* Hawle & Corda, *Phacops altaicus* Tschernyshev, *P. cristata* pipa Hall & Clarke, *P. sternbergi* H. & C., *Phillipsia* ? *abscisa* Weber, *Proetus sibiricus* T., Maksimova; *Megistaspis acuticauda* (Angelin), *M. grandis* (Sars), *M. heros* (Dalman), *M. lawrowi* (Schmidt), Bohlin; *Nesouretus ramseyensis* Hicks, *Ormathops nicholsoni* (Salter), Whittard; *Ogygiocaris dilatata* (Brünnich), O. d. *stromi* Angelin, O. *sarsi* lata Hadding, Henningsmoen; *Protophytophyge prisca* (Lamanaky), Balashova (3); *Spathacalymene nasuta* (Ulrich), Tillman.

STRUCTURE

Terminology.—Anterior area (bounded laterally by anterior furrows) for area in front of glabella of *Nesouretus*, Whittard; *Paradoublural line* for impression of inner edge of doublure on dorsal test, *band furrow* for furrow delimiting posterior band of occipital and axial thoracic rings, Henningsmoen;

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Precranial lobe for part of glabella in front of facial suture in e.g. *Encrinurus* and *Eodindymene*, **Kielan (1)**; Pygidial pleural terminology of Brachymetopids, **Whittington (1)**.

Segmentation.—Larval cephalic spines considered to be segmental; cephalic segmentation inferred thereby as follows: ocular, x_2 , x_1 , x , pnt, A1, three glabellar lobes, occipital; larval cheek furrows considered intersegmental, **Hupé (2)**; Asaphids considered to show evidence of three segments (x represented by parafrontal band, pnt, antennular) in front of third glabellar lobe, **Henningsmoen**.

Glabella.—Parafrontal band of Asaphids considered part of glabella; median paired glabellar impressions found in this family may be ligament suspensions, **Henningsmoen**.

Glabellar furrows.—Alternative interpretation suggested of the furrows (or impressions) of Scutelluidae, **Šnajdr**; Furrows of *Megistaspis* may be occupied by narrow ridges, **Bohlin**.

Anterior pits.—Two pairs of pits in axial furrows of *Phillipsinella parabola*, **Kielan (1)**.

Cephalic spines.—Larval cephalic spines considered segmental and a terminology for them suggested, **Hupé (2)**; Some young stages of Scutelluidae have an occipital and a median glabellar spine which are only rarely (as in *Cornuscutellum*) retained in adults, **Šnajdr**.

Anterior cephalic processes.—Discussion of morphology, distribution and function of these processes, description of spatulate process in *Spathacalymene*, **Tillman**.

Cephalic sutures.—Dindymeninae (except *Plasiaspis*) have no connective sutures; in *Eodindymene* facial suture passes in front on to glabella, in *Dindymene* it lies in marginal furrow, **Kielan (1)**; In *Cornovicia* (Encrinuridae) facial suture is proparian on dorsal surface of test and opisthoparian on ventral surface; connective sutures are present, **Whittard**.

Ventral cephalic sutures.—Comparison in some U. Cambrian genera, **Palmer (1)**.

Facial sutures.—Present in *Cordania* and other Brachymetopids except *Brachymetopus*, **Whittington (1)**.

Alae.—Alae of *Megistaspis* considered to belong to glabella, **Bohlin**.

Palpebral lobes.—Bipleurality and tripleurality discussed; meraspis of *Daguinaspis* has undivided lobes, **Hupé (2)**.

Rostral plate.—A subtriangular rostral plate occurs in several unrelated genera including *Carmon*, **Kielan (1)**; Long crescentic rostral plate in *Australosutura gardneri* (Brachymetopidae), **Amos et al.**

Pygidium.—Barrande's and Richters' opinion that each pygidial rib in Scutelluidae corresponds to one pleura upheld by discovery of pleural furrows in several spp.; posterior median rib considered to be formed from two fused ribs, **Šnajdr**; In *Housia* last thoracic segment is often incompletely separated from pygidium, **Palmer (1)**.

Doubleure.—Pygidial doubleure of Scutelluidae becomes wider during evolution, **Šnajdr**.

Structure of integument.—Canals through test at front of cephalon of *Nesocretus*, **Whittard**; Pits and striations of test of *Megistaspis*, **Bohlin**.

Ornamentation.—Importance as a specific criterion, **Palmer (1)**; Reticulation in Trinucleids is common in young stages but usually disappears by the adult and its absence cannot be used as a generic criterion, **Dean (1)**.

Musculature.—Muscle insertion areas of *Illeenus lacertus*, **Whittington (3)**; Externally smooth inner parts of two posterior pairs of glabellar furrows of *Platycalymene* interpreted as muscle insertions, scars on two posterior pairs of glabellar lobes of *Nesocretus* similarly interpreted, **Whittard**.

Teratology.—Structures interpreted as infilled borings in tests of *Megistaspis*, **Bohlin**; Pygidium of *Dunderbergia bigranulosa* with partly fused thoracic segments, pygidium of *Housia ovata* with right thoracic pleura still fused, asymmetrical cranidium of *Minuipeltis conservator*, **Palmer (1)**; Pygidial deformities in several Scutelluidae including healed fractures in *Bojoscutellum patiferum*, *Breviscutellum inerme* and *Planiscutellum planum*, **Šnajdr**.

PHYSIOLOGY AND SEX

Dimorphism.—Two types of librigena associated with both *Dunderbergia bigranulosa* and *D. varigranula*, **Palmer (1)**; *Platycalymene duplicata*—Salter's *forma femina* and *forma mas* both found preserved in relief, **Whittard**.

DEVELOPMENT

Ontogeny.—General work, **Hupé (2)**; Remarks on ontogeny of *Ogygiocaris sarsi*, **Henningsmoen**; Immature stages of *Kosovopeltis svobodai* and other Scutelluidae; meraspis stages are characterised by stronger vaulting, narrower glabella, presence of occipital and median glabellar spines; pre-anal hypothesis of origin of segments upheld, **Šnajdr**; Immature stages of *Bailiella lantonioi*, **Kobayashi (4)**; Immature stages of *Elvinia roemeri*, *Holacephalus tenerus* (with protaspides), *Taenicephalus shumardi*, **Lochman & Hu**; Meraspis (degree 3) of *Pseudogygites latimarginatus* (Hall), **Fritz**; Cephalic ontogeny of *Onnia superba* and *Reuscholithus reuschi*, **Dean (1)**; Transitory pygidia of *Housia ovata*, **Palmer (1)**; Young stages of *Aldonaia terea*, *Bulaiaspis modesta*, *Elganellus elegans*, *Malykania noctujensis*, **Suvorova**.

Ecdysis.—Salter's *sche Einbettung* described in *Ogygopsis* but considered in this case not exuvial, **Lehmann**.

EVOLUTION AND CLASSIFICATION

Evolution.—Neoteny of proparian forms reaffirmed, **Hupé (2)**.

Phylogeny.—Phylogeny of Scutelluidae discussed, **Šnajdr**; Evolution of Shropshire Trinucleidae, **Dean (1)**; Family relations of Redlichioidea and Corynexochioidea, **Suvorova**.

Evolutionary series.—Series in *Pseudagnostus* showing gradual effacement of posterior part of pygidial axis, **Rozova (2)**.

Postulated lineages.—Suggested lineage in *Actinopeltis* with reduction of genal and pygidial spines, **Kielan (1).**

Vertical ranges.—Faunas straddling Cambrian-Ordovician junction in Montana, difficulty of drawing this boundary, **Lochman-Balk.**

Variation.—Variation from 'wide' to 'long' forms of some U. Ordovician spp. considered to be preservational not sexual; no evidence of geographical subsp. in Poland, Bohemia and Sweden, but some (doubtful) examples recognised between Poland and Britain, **Kielan (1).**

Classification (principles of).—Principles of generic discrimination of Soutelluids discussed, **Šnajdr**; Among U. Cambrian trilobites from Nevada species are distinguished primarily on surface ornament, genera on differences of shape, **Palmer (1)**; Reticulation not a generic character in Trinucleids, **Dean (1).**

Classification.—Classification into: Miomera (Agnostida) and Polymera (Redlichia, Corynexochida, Ptychopariida [including Calymenina], Phacopida, Lichida [including Odontopleurina], **Kobayashi (3)**; Calymenidae and Homalonotidae referred to order Mesoparia, **Lisbõa.**

ECOLOGY AND HABITS

Habits.—Anterior cephalic processes may have served as counterbalances to keep posterior part of the body slightly raised during feeding, **Tillman.**

Migration.—Olenellids of Western American affinities in Lower Cambrian (lower Slakii Series) of Spitsbergen, **Kielan (2)**; Migration of Ashgillian faunas between Sweden, Poland, Bohemia and Britain discussed, **Kielan (1)**; At Cerrillo El Solitario (Argentina) there is a mixed Middle Cambrian fauna with Acado-Baltic (*Jinella brachymetopa* zone) and Pacific (*Bolaspidea* zone) elements, suggested correlation with the *Centropleura vermontensis* fauna of Vermont, **Poulsen (2)**; Correlation of U. Cambrian of U.S.A. and U.S.S.R., **Ivshin.**

DISTRIBUTION AND FAUNAS

Cambrian.—Australia (Queensland), **Öpik & Pritchard**; S. Korea, China, Manchuria, Iran, **Kobayashi (4)**; U.S.S.R. (N.E. Siberia), **Tkachenko.**

Cambrian (Lower).—Boreal regions, **Cowie**; Britain (N. Wales), **Bassett & Walton**; French West Africa, **Poulsen (1)**; Morocco (Anti-Atlas), France, **Hupé (3)**; Poland (Holy Cross Mts.), **Samsonowicz**; Spitsbergen (Vestspitsbergen), **Kielan (2).**

Cambrian (Lower & Middle).—Germany, **Sdzuy (1)**; U.S.A. (Calif., Nevada), **Nelson**; U.S.S.R. (E. Sayan), **Rapina**; U.S.S.R. (Siberian Platform), **Suvorova.**

Cambrian (Middle).—Argentina (Mendoza), **Poulsen (2)**; Australia (Queensland), **Noakes et al.**; Canada (B.C.), **Lehmann**; Poland (Holy Cross Mts.), **Orłowski**; U.S.S.R. (Kazakhstan), **Borukaev & Ivshin (1).**

Cambrian (Middle & Upper).—U.S.A. (Wyoming), **Lochman & Hu.**

Cambrian (Upper).—Korea (South), U.S.A., **Kobayashi (3)**; U.S.A., **Palmer (2)**; U.S.A. (Montana), **Lochman-Balk**; U.S.A. (Nevada), **Palmer (1)**; U.S.S.R. (Altai-Sayan, etc.), **Ivshin**; U.S.S.R. (Kazakhstan), **Borukaev & Ivshin (2)**; U.S.S.R. (Salsir), **Rozova (1), (2).**

Ordovician.—Eastern Asia, **Kobayashi (2)**; Estonia, **Rõõmusoks**; Korea (South), Himalayas, China, Scotland, **Kobayashi (3)**; Morocco, **Destombes et al.**; Spain (Ciudad Real), **Linares.**

Ordovician (Lower).—Scandinavia, Baltic, Bohlin; Spitsbergen, **Gobbett, Gobbett & Wilson**; Sweden (Scania), **Tjernvik**; U.S.A. (Montana), **Lochman-Balk**; U.S.S.R. (Baltic), **Balashova (3)**; U.S.S.R. (Kazakhstan), **Borukaev & Ivshin (2)**; U.S.S.R. (W. Siberia), **Rozova (2).**

Ordovician (Lower & Middle).—Australia (Queensland), **Öpik & Pritchard**; Britain (Shropshire, Wales, Lake District), **Whittard.**

Ordovician (Middle).—Britain (Shropshire), **Dean (1), (3)**; Britain, Scandinavia, **Dean (2)**; Canada (Quebec), **Šnajdr**; Canada (Ontario), **Fritz**; Czechoslovakia (Bohemia), **Kielan (1)**; Eire (Mayo), **Stanton**; Germany (Thuringia), **Volk**; Norway (Oslo), Sweden, **Henningsmoen**; U.S.A. (Oklahoma), **Amsden & Ham**, **Sutherland & Amsden**; U.S.A. (Virginia), **Whittington (2)**; U.S.S.R. (E. Siberia), **Bogdanov & Chugaeva.**

Ordovician (Middle or Upper).—Viet Nam, **Kobayashi (1).**

Ordovician (Middle & Upper).—U.S.S.R. (Arctic), **Balashova (1)**; U.S.S.R. (Kazakhstan), **Chugaeva.**

Ordovician (Upper).—Britain (S. Wales, N. England), **Cave**; France (Pyrenees), **Cavet**; Poland (Lysa Gora), Scandinavia, Bohemia, Britain, **Kielan (1)**; U.S.S.R. (Siberia), **Kramarenko.**

Silurian.—Britain (W. England), **Squirrel & Tucker**; Czechoslovakia, U.S.S.R., **Šnajdr**; France (Pyrenees), **Cavet**; U.S.A. (Texas), **Wilson & Majewski.**

Silurian ?.—Nepal, **Pillet (3).**

Silurian (Lower).—Britain (Eire), **McKerrow & Campbell**; Sahara, **Barlier et al.**; U.S.S.R. (Arctic), **Balashova (1).**

Silurian (Middle).—Eire (Mayo), **Anderson**; U.S.A. (Indiana), **Tillman.**

Silurian (Middle or Upper).—U.S.A. (Calif.), **Churkin & Langenheim.**

Silurian (Middle & Upper).—Britain, **Dean (4)**; Czechoslovakia (Bohemia), **Přibyl.**

Silurian (Upper).—Britain, **Lawson**; Canada (Arctic), **Boucot et al.**; Poland (Lysa Gora), **Tomeczkova.**

Devonian.—Britain (S.W. England), **Stubblefield**; U.S.A. (Texas), **Wilson & Majewski**; U.S.S.R. (Altai), **Maksimova.**

Devonian (Lower).—France (Armorican massif), **Pillet (2)**; U.S.A. (Oklahoma), **Frederickson**.

Devonian (Lower & Middle).—Czechoslovakia (Bohemia), **Příbyl, Šnajdr**; Morocco, **Cogney**; U.S.A., **Whittington (1)**.

Devonian (Middle).—Colombia, **Bürgl**; Czechoslovakia, **Chlupáč & Vaněk**; Czechoslovakia (Silesia), **Štrnad (1)**; France (Pyrenees), **Cavet**; Germany (Thuringia), **Alberti**; Japan (Iwate), **Okubo**.

Devonian (Middle & Upper).—Japan, **Sugiyama**.

Devonian (Upper).—Britain (W. England), **Selwood**; U.S.S.R. (Kuznetsk basin), **Bel'skaya**.

Devonian (Upper) or Carboniferous (Lower).—Japan (Iwate), **Okubo**.

Carboniferous.—Argentina (Chubut), **Australia (N.S.W.)**, **Amos et al.**; U.S.A. (Wyoming), **Hoare & Burgess**.

Carboniferous (Lower).—Britain (N. England), **Wilson**; Britain (W. England), **Prentice, Selwood**; Czechoslovakia, **Štrnad (2)**; U.S.A. (N. Mex.), **Armstrong**; U.S.S.R. (Altai), **Maksimova**.

Carboniferous (Lower-Upper).—Britain (Northumberland), **Johnson**.

Carboniferous (Upper).—Czechoslovakia, **Bouček & Příbyl**; Jugoslavia, **Milošević**; Jugoslavia (W. Serbia), **Stevanović**.

Permian (Middle).—Sicily, **Ruggieri**.

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N.B.—Since all the species of the group are fossil, the † used elsewhere in the Zoological Record to indicate fossils is here omitted.

Acadoparadozoides maroccanus n. sp. [nom. nud.], **A. sacheri** (Barr.) p. 81, **Hupé (3)**.

Acanthaloma mirka Marek 1952 a synonym of *Leonaspis olivi* Troedsson p. 101, **Kielan (1)**.

Acanthaloma (A.) tenella sp. n. p. 68 pl. viii fig. 14 Devonian (Upper) U.S.S.R. (Altai), **Maksimova** Devonian and Carboniferous trilobites of the Rudny Altai 1960.

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Acanthomicmacca Hupé a synonym of *Paramicmacca* Lermontova p. 68, **Suvorova**.

Acanthoparypha text-figs. 5A-I, J (reconstr.), **Whittington (2)**.

Acanthopyge aff. *haueri* (Barrande 1852) p. 64 pl. iii fig. 14 text-fig. 3, *A. aff. contusa* (Hall & Clarke 1888) p. 66 pl. iii fig. 6, *A. ?* sp. p. 67 pl. vi fig. 10; *A. parva* (Khalfin 1948) [not seen] discussed p. 65, **Maksimova**.

Acanthopyge aff. *haueri* (Barr.) p. 350, **Chlupáč & Vaněk**.

Acaste dayiana R. & E. Richter p. 350, **Tomczykowa**.

Acastella macrocentrus Reed, *A. spinosa* (Salter) p. 177, **Squirrell & Tucker**.

Acastella rouaulti—revision in abstract p. 239, **Pillet (1)**.

Acastella rouaulti (de Tromelin et Lebesconte) 1875 em. Péneau 1928 description and affinities p. 939 pl. xlv figs. 1-7 text-figs. 1 (reconstr.)-2, **Pillet (2)**.

Acastella spinosa (Salter) p. 350 [altered by hand to *A. tiro* in offprint from author p. 352], *A. sp.* p. 350, **Tomczykowa**.

Achatella see *Pterygometopus*.

Acidaspis myops Richter 1863 type of *Leonaspis (Grossia)* subgen. n. p. 116, **Alberti**.

Acrocephalaspis [Ivashin] may belong to Housiidae p. 74, **Palmer (1)**.

Acrocephalitidae see *Elatelimbis* gen. n.

Acrocephalitinae discussed with list of genera and referred to Dokimiocephalitidae p. 383, **Kobayashi (4)**.

Acrolichas clarus Koroleva [not seen] pl. ix fig. 10, **Chernysheva et al.**

Actinopeltis Hawle & Corda 1847 discussed pp. 49-50, diagrammatic comparison of spp. forming a possible lineage text-fig. 8, *A. barrandei* sp. n. for *Cheirurus insocialis* of Barrande 1872 [non 1852] p. 130 text-fig. 8d Bohemia, *A. cf. gryphus* (B. 1872) p. 131 pl. xxiv fig. 3, *A. g.* ventral sutures text-fig. 7, *A. cf. globosa* (B. 1852) p. 131 pl. xxiv figs. 1-2, *A. sp. a* p. 132 pl. xxiv fig. 4 text-fig. 36, *A. sp. b* p. 133 pl. xxiii fig. 7 Poland (Lysa Gora) Ordovician (Upper); *Cheirurus neglectus* of B. 1872 partim [pl. 3 fig. 18] probably belongs to *A. insocialis* p. 140, **Kielan** Palaeont. polon. No. 11 1960.

Aeglina ? oblongula Angelin type refigured and a synonym of *Microparia speciosa* [q.v.] p. 89, **Kielan (1)**.

Aglagalia n. gen. [nom. nud.] [Terrierellidae] p. 77, *A. brevissima* n. sp. [nom. nud.] p. 81, **Hupé (3)**.

Agnostid indt. p. 40 pl. v fig. 3, **Kobayashi (1)**.

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Agnostidea see *Stigmagnostus* gen. n.

Agnostus exsulatus sp. n. p. 6 pl. i figs. 3-4 Cambrian (Middle) Argentina (Mendoza), **Poulsen** Mat.-fys. Medd. danske Vid. Selsk. 32 11 1960.

Agnostus glabratus Angelin a synonym of *Trinodus tardus* [q.v.] p. 59, **Kielan (1)**.

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Agraulos divi Walcott type of *Latilorenzella* gen. n. to which is also referred *A. regularis* W. p. 390, Kobayashi (4).

Alacephalus gen. n. [family undetermined] for type *A. contortus* sp. n. p. 222 pl. xi figs. 11-13 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Alanisia migratoria n. sp. [nom. nud.] p. 82, Hupé (3).

Albertella pacifica Walcott referred to *Chiawangella* p. 354, Kobayashi (4).

Aldonaida Lermontova discussed, *A. tersa* sp. n. with young stages p. 76 pl. v figs. 14-17, pl. vi figs. 1-10 text-figs. 25-26 Cambrian (Lower) U.S.S.R. (Siberian Platform), Suvorova Trud. paleont. Inst. S.S.S.R. 84 1960.

Aldonaidae discussed p. 75, Suvorova.

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Alsataspidae preferred to Selenocemidae and discussed p. 117, Whittard.

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Ameura sp. p. 715 pl. xci fig. 3, Hoare & Burgess.

Amgaspidae fam. n. [Corynexochoidea] for *Amgaspis* Chernysheva 1956 p. 76, Chernysheva Principles of Palaeontology. Arthropods—Trilobitomorpha and Crustaceans 1960.

Amgaspis Chernysheva 1956 referred to Amgaspidae fam. n. p. 76, *A. medius* C. text-fig. 71, Chernysheva et al.

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Amphitryon radians (Barrande 1846) p. 65 pl. ii figs. 3-7, pl. iii fig. 11, *A. sp.* p. 67 pl. iii fig. 12, Kielan (1).

Ampyz depressus (Angelin) var. *otradnica* var. n. p. 32 [pl. i figs. 20-23] Ordovician (Middle), *A. nordicus* sp. n. p. 33 [pl. vi figs. 1-5], *A. borealicus* sp. n. p. 34 [pl. vi figs. 8-9] Ordovician (Upper) U.S.S.R. (Arctic), Balashova Sborn. stat. paleont. biostat. 17 [pls. in 14] 1960.

Ampyz edgelli Reed type of *Ampyzella* gen. n. to which are possibly also referable *A. latus* McCoy, *A. volborthi* Schmidt and *A. ? aculeatus* Angelin p. 80, Dean (1).

Ampyz globifrons Olin a synonym of *Raphiophorus gratus* (Barrande) p. 167, *A. tetragonus* Angelin and *A. t. var. gigas* Linnarsson synonyms of *Lonchodomas portlocki* (B.) p. 171, Kielan (1).

Ampyz sp. p. 31, Bogdanov & Chugaeva.

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Ampyzella gen. n. [Raphiophoridae] for type *Ampyz edgelli* Reed 1932 lectotype selected and figured p. 80 pl. xi figs. 1, 3-4, 6-7 Ordovician (Middle) Britain (Shropshire); *A. latus* McCoy, *A. volborthi* Schmidt, *A. ? aculeatus* Angelin possibly referable to *Ampyzella* p. 80, Dean Bull. Brit. Mus. (nat. Hist.) [Geol.] 4 4 1960.

Ampyzina taimyrica sp. n. p. 35 [pl. vi figs. 10-14] Ordovician (Middle) U.S.S.R. (Arctic), Balashova Sborn. stat. paleont. biostat. 17 [pls. in 14] 1960.

Anchiops Delo referred to Monorakeidae (Carinopygidae) subfam. n. p. 8, Balashova (1).

Anecocephalus gen. n. [Ptychoparioidea (? Pterocephaliidae), may belong to Pterocephaliinae p. 84], *A. trigranulatus* sp. n. p. 92 pl. viii figs. 21-23 Cambrian (Upper) U.S.A. (Nevada), Palmer Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Anomocarella memor (Reed) p. 211 pl. xviii figs. 12-13, Repina.

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Antagminae discussed p. 128, Suvorova.

Antagmopleura Lermontova [nom. nud.] [Agraulidae], *A. sp.* p. 202 pl. xvi figs. 13-14 Cambrian (Middle) U.S.S.R. (E. Sayan), Repina.

Antialaeva n. gen. [nom. nud.] [Strenuaeinae] p. 77, Hupé (3).

Aojia Resser & Endo 1937 a synonym of *Lisania* p. 368, Kobayashi (4).

Aotiaspis gen. n. [Kainellinae] p. 246 for type *A. oblonga* sp. n. p. 247 pl. xiv figs. 7-13 text-fig. 6b, *A. ovalis* sp. n. p. 247 pl. xiv fig. 14 Ordovician (Lower) Korea (South), *A. sp.* indet. for *Pseudokainella* ? b [3] sp. Kobayashi 1953 p. 248; *A. lohanpoensis* (Sheng) for *Kainella* l. S. p. 247 text-fig. 6c, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Apatokephalina Sivov discussed and tentatively referred to Richardsonellidae p. 242, Kobayashi (3).

Apatokephalina referred to Proapatokephalidae fam. n. p. 33, Rozova (2).

Apatokephaloides referred tentatively to Eurekaia
p. 237, Kobayashi (3).

Apatokephaloides referred to Proapatokephalidae
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Apatokephalus discussed and referred to Proapato-
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Rozova Trud. Inst. geol. geophiz. AN S.S.S.R.
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Apatokephalus hyotan Kobayashi p. 248 text-figs.
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Apatokephalus schoriensis Poletaeva [not seen] pl.
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gen. n. and possibly *Maladioidella*, Palmer Prof.
Pap. U.S. geol. Surv. No. 334-C 1960.

Aphelaspis referred to Aphelaspidinae subfam.
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Artokephalus discussed and referred to Proapa-
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ningsmoen Norsk geol. Tidsskr. 40 3-4 1960.

"*Asaphus*" *luthardti* table 1 p. 6, Volk.

Asaphus myops König referred to *Dalmanites*
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Asaphus priscus Lamansky type of *Protoptychopyge*
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Asiptychaspis Kobayashi discussed with list of
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Aspidagnostinae subfam. n. [Agnostidae] p. 60
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ciples of Paleontology. Arthropods—Trilobitomorpha
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Aspidagnostus Whitehouse 1936 referred to Aspi-
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Aulacopleura (*Paraaulacopleura*) *halfari* Strnad
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Baltagnostus hospitus sp. n. p. 7 pl. i figs. 5-6 [provisionally associated cephalia may belong to *Peronopsis ultima* sp. n.], *B. mendozensis* sp. n. p. 8 pl. i fig. 7 Cambrian (Middle) Argentina (Mendoza), Poulsen Mat.-fys. Medd. danske Vid. Selsk. 32 11 1960.

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Binodaspis Lermontova discussed p. 128, *B. prima* L. 1951 [sp. n.—name provisionally suggested by L.] for *B. sp. I* L. p. 129 pl. xii figs. 7-8, 18, text-fig. 42, *B. secunda* sp. n. for *B. sp. II* L. p. 131 pl. xii figs. 9-12 text-fig. 43, *B. paula* sp. n. p. 133 pl. xii figs. 13-16 text-fig. 44 Cambrian (Lower) U.S.S.R. (Siberian Platform), Suvorova Trud. paleont. Inst. S.S.S.R. 84 1960.

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Birmanitidae fam. n. [Dikelocephalidina] p. 254 for *Birmanites* and by implication *Tropidopyge* and *Hagiorites*, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Blackvelderia biloba Kobayashi referred to *Dame-sops* p. 353, *B. ? cornuta* Endo to *Diceratocephalus* p. 391, Kobayashi (4).

Bojoscutellum Šnajdr 1958 discussed p. 98 (252), *B. paliferum* p. (Beyrich 1845) neotype chosen and figd. [excluding Barrande 1852 pl. 45 figs. 20-21 (to *Breviscutellum inerme*), pl. 45 fig. 4 and B. 1872, and with synonym *Bronteus intermedius* Hawle & Corda lectotype chosen and figd.] p. 99 pl. x figs. 1-7, pl. xi figs. 1-4, pl. xii fig. 1, pl. xiii figs. 5-6, pl. xxxv fig. 14, text-figs. 6, 32-33, *B. p. pseudopaliferum* subsp. n. p. 103 (252) pl. xiv fig. 5, *B. conspersum*

(Prantl 1949) holotype figd. including *B. p.* of *B.* 1872 p. 104 pl. xiii figs. 1-4 text-fig. 34, *B. crassico-statum* sp. n. including *B. p.* of *B.* 1852 pl. 45 fig. 4 p. 105 (253) pl. xiii fig. 7, pl. xiv figs. 1-4, text-fig. 35, ? *B. konéprusiense* sp. n. p. 107 (253) pl. xi figs. 5-6, pl. xxxvi fig. 9, text-fig. 36 Devonian (Lower) Bohemia, Šnajdr Rozpr. Úst. úst. geol. 26 1960.

Bojoscutellum ? *pompilius* (Billings 1869) p. 415 pl. liv figs. 13-16, 20-21, 24-25, Whittington (1).

Bolaspidea luciae sp. n. p. 28 pl. ii figs. 16-17 Cambrian (Middle) Argentina (Mendoza); librigena assigned to *Champlainia rectimargo* Howell 1937 (pl. 5 fig. 34) referred to *B. p.* 29, Poulsen Mat.-fys. Medd. dansk. Vid. Selsk. 32 11 1960.

Bolaspidea resseri (Miller) holotype figured pl. o figs. 36-38, Lochman & Hu.

Bolbocephalus cf. *seeleyi* (Whitfield), *B.* sp. nov. [undescrib.], ? *B. p.* 451, Gobbett & Wilson.

Bollandia see *Griffithides*.

Bonnia veternosa sp. n. p. 199 pl. xi figs. 5-7, *B. arguta* sp. n. p. 200 pl. vii figs. 1-2 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Bonniella ? *hispanica* Richter & Richter a synonym of *Hicksia elvensis* Delg. p. 82, Hupé (3).

Botomella Suvorova 1958 discussed with synonym *Sayanella* Pokrovskaya 1959 p. 149, *B. ekaterinae* S. holotype figured p. 150 pl. xiii figs. 9-12 text-fig. 49, Suvorova.

Brachymetopidae Prantl & Přibyl 1951 discussed with diagnosis and taken to include *Cordania*, *Mystrocephala* gen. n., *Tschernyshevella*, *Piltonia* and *Brachymetopus* p. 407, Whittington (1).

Brachymetopidae see *Australoscutura* gen. n.

Brachymetopidae see *Mystrocephala* gen. n.

Brassiccephalus see Genus and species undet. 1.

Breviscutellum gen. n. [Scutelluidae] p. 172 (258) for type *B. transversum* (Hawle & Corda 1847) for *Bronteus transversus* H. & C. holotype figd. p. 173 pl. xxxii figs. 10-11, ? 12, *B. inerme* (B. 1852) lectotype chosen and figd. [with synonyms *Scutellum nováki* and *bohemicum* Prantl & Přibyl holotype figd., and excluding records of i. by Kegel 1926 and Weber 1945 (later to *Decoroscutellum* nov. sp.)] p. 174 pl. xxxiii figs. 1-8 text-fig. 54, *B. ivanense* (B. 1872) holotype figd. p. 177 pl. xxxii figs. 5-6, *B. obsoletum* sp. n. p. 178 (259) pl. xxxiii figs. 10-11, pl. xxxiv fig. 1, *B. angusticeps* (B. 1846) with synonym *B. sculptus* H. & C. lectotypes of both chosen and figd. p. 178 pl. xxxiv figs. 2-7 Devonian (Lower) Bohemia, Šnajdr Rozpr. Úst. úst. geol. 26 1960.

Broeggerolithus Lamont 1935 discussed with synonym *Ulricholithus* Bancroft p. 102, distinctions from *Onnia* p. 127, three groups of spp. recognised p. 103—(1) *B. harnagensis* (B.) for *Salterolithus* h. *B.* lectotype selected and figured p. 105 pl. xvi figs. 5, 9, 13, *B. h.* ? p. 106 pl. xvi fig. 1, *B. cf. h.* (B.) for *S. aff. h.* B. 1949 p. 107 pl. xvi figs. 7, 11, *B. ?* sp. p.

108 pl. xvi fig. 2; (2) *B. ulrichi* (B.) p. 109 pl. xvii figs. 10-11, *B. broeggeri* (B.) lectotype figured p. 111 pl. xvi figs. 3, 10, *B. cf. b.* (B.) p. 112 pl. xvi figs. 4, 8, 14, *B. constrictus* B. holotype figured p. 113 pl. xvi figs. 6, 12, *B. soudleyensis* (B.) including *B. aff. e.* Dean 1958 p. 115 pl. xvii figs. 1-9, 17, *B. globiceps* (B.) lectotype selected and figured p. 117 pl. xvii figs. 13, 15-16, *B. sp.* (? nov.) p. 119 pl. xvii fig. 12, *B. simplex* sp. n. [tentatively in group 2] p. 120 pl. xvii fig. 14; (3) *B. longiceps* (B.) lectotype selected and figured p. 121 pl. xviii figs. 1, 4-6, 10, *B. transiens* (B.) p. 123 pl. xviii figs. 2-3, 7-8, 11-14, *B. cf. t.* (B.) p. 126 pl. xviii fig. 9 Ordovician (Middle) Britain (Shropshire); *Trinucleus discors* Angelin may belong to *B. p.* 104, *T. gibbifrons* of Reed 1914 resembles *B. g.* p. 104, *Cryptolithus* cf. *g.* of Whittington 1938 may be *B. sp.* (? nov.) or *B. simplex* p. 121, Dean Bull. Brit. Mus. (nat. Hist.) [Geol.] 4 4 1960.

Broeggerolithus cf. *broeggeri* (Bancroft) p. 167, *B. cf. globiceps* (B.), *B. longiceps* (B.), *B. cf. l.* p. 168, Dean (3).

Brongniartella cf. *parva* Harper p. 167ff., *B. bisulcata* (M'Coy), *B. ?* sp. p. 168, Dean (3).

Brongniartella platynotus (Dalman 1828) with synonym *Homalonotus inexpectatus* Barrande 1872 p. 116 pl. xix figs. 1-3, Kielan (1).

Bronteus aff. *costatus* (Pusch), *B. mirabilis* N. Tchern, *B. granulatus*, *B. sp.* p. 121, Bel'skaya.

Bronteus hawlei Barrande (with synonym *B. asperulus* Hawle & Corda) type of *Microscutellum* gen. n. [q.v.] to which are also referred *B. zippei* and *B. tenellus* B. p. 92, *B. pustulatus* B. type of *Metascutellum* gen. n. [q.v.] p. 184, *B. rhinoceros* B. type of *Cornuscuteum* gen. n. p. 108, *B. simulans* B. type of *Protoscuteum* gen. n. [q.v.] p. 64, *B. transversus* H. & C. type of *Breviscutellum* gen. n. to which are also referred *B. angusticeps*, *B. inermis* and *B. ivanensis* B. p. 172, *B. umbellifer* Beyrich (with synonym *B. sparsus* H. & C.) type of *Spiniscutellum* gen. n. p. 111; *B. aciculatus* H. & C. nom. dub. p. 208, *B. partechi* B. referred to *Kosovopeltis* [q.v.] p. 70; *B. carinatus* and *B. subtriangularis* H. & C. synonyms of *Kosovopeltis partechi* p. 70, *B. intermixtus* H. & C. of *Bojoscutellum paliferum* p. 100, *B. berkeleyanus* H. & C. of *Platyscutellum formosum* p. 119, *B. sosia* B. of *P. spiniferum* p. 129, *B. gervilleicans* B. of *Poroscutellum infaustum* p. 136, *B. gigas* H. & C. of *Scabriscutellum caelebs* p. 144, *B. tardissimus* B. of *Scabriscutellum richteri* p. 148, *B. thysanopeltis* B. of *Thysanopeltis speciosa* p. 157, *B. scharyi* B. of *Kolihapeltis brevifrons* p. 170, *B. sculptus* H. & C. of *Breviscutellum angusticeps* p. 178, *B. pulcher* H. & C. of *Paralejurus brongniarti* p. 193, *B. aulicus* H. & C. of *P. dormitieri* p. 196, Šnajdr.

Bulaispis Lermontova discussed p. 184, *B. prima* L. p. 185 pl. xix figs. 1-2, *B. taseevica* sp. nov. [Repina 1956] holotype figured p. 186 pl. xix figs. 3-5, pl. ii figs. 7-12, *B. peleduca* sp. n. [nondescr. 1956] p. 188 pl. xix figs. 6-8, *B. sajanica* sp. n. p. 189 pl. iii figs. 1-4, *B. limbata* sp. n. p. 192 pl. iii figs. 5-8, *B. mana* sp. n. p. 193 pl. iii figs. 9-11, *B. vologdini* L. p. 184 pl. ii figs. 1-6, *B. sp.* pl. iii fig. 12, *B. sp.* pl. xix figs. 9-13 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Bulaispis Lermontova discussed with table of spp. p. 23, *B. tolbatchanica* sp. n. p. 24 pl. i figs. 5-9 text-figs. 3-4, *B. modesta* sp. n. with ontogenetic stages p. 27 pl. i figs. 10-18, pl. ii figs. 1-13, text-figs. 5-7, *B. taseevica* Repina 1956 p. 33 pl. ii figs. 14-19, text-figs. 8-9 Cambrian (Lower) U.S.S.R. (Siberian Platform), *Suvorova* Trud. paleont. Inst. S.S.S.R. 84 1960.

Bumastes [sic] *barriensis* (Murchison) p. 177, *Squirrell & Tucker*.

Bumastus sp. ? p. 270, *Anderson*.

Burnetia sp. cf. *B. alta* Resser p. 812 pl. xvi figs. 3-7, *Lochman & Hu*.

Bynumia see Genus and species undet. 3.

Bynumiella ? *acuminata* sp. n. p. 93 pl. x figs. 9-10 text-fig. 21 (reconstr.) Cambrian (Upper) U.S.A. (Nevada), *Palmer* Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Bynumina Resser 1942 discussed p. 93, *B. globosa* (Walcott) for *Agraulos* ? *g. W.* p. 94 pl. x fig. 8, *Palmer* (1).

Callavia *choffati* (Delg.)—*C. lotzei* Richter & Richter probably a synonym p. 82, *Hupé* (3).

Calliops cf. *armatus* Ulr. and Delo p. 30, *Bogdanov & Chugaeva*.

Calliops strasburgensis text-figs. 4c-d, *Whittington* (3).

Calliops taimyricus sp. n. p. 5 [pl. v figs. 9-12] Ordovician (Upper) U.S.S.R. (Arctic), *Balashova* Sborn. stat. paleont. biostrat. 17 [pls. in 14] 1960.

Calvinella Walcott discussed with list of Asian spp. p. 405, "*C.*" sp. indet. listed p. 336; *C.* sp. *Kobayashi* 1935 referred to *Saukiella* sp. p. 407, *Kobayashi* (4).

Calybale see *Cyrtosymbale*.

Calymenacea see Carmonidae fam. n.

Calymenacea see Synhomalonotidae fam. n.

Calymene (*C.*) *beyeri* R. & E. Richter, *C. (C.) blumenbachii* Brongn., *C.* sp. p. 350, *Tomczykowa*.

Calymene blumenbachii Brongniart, *C.* cf. *beyeri* (Richter), *C. neointermedia* (R. & E. R.), *C.* sp. p. 177, *Squirrell & Tucker*.

Calymene ex gr. *blumenbachii* Brongniart 1822 p. 70 pl. vii figs. 1-3, *Maksimova*.

Calymene collicephala Green text-figs. 512a-d, *C. incerta* Barrande text-fig. 589, *Müller*.

Calymene douvillei Mansuy type of Vietnamia gen. n. p. 43, *Kobayashi* (1).

Calymene hornigi n. sp. [nom. nud.] p. 114; *C. tenera* Barrande is apparently identical with *Metacalymene baylei* (B.), *Vaněk*.

Calymene (*Colpocoryphe*) *inopinata*, *C.* sp., *C. pulchra* table 1 p. 6, *Volk*.

Calymene nasuta Ulrich type of *Spathacalymene* gen. n. p. 892, *Tillman*.

Calymene neointermedia R. & E. Richter pp. 119, 123, *Lawson*.

Calymene sampelayoi sp. n. p. 136 pl. xiv figs. 1-2 Ordovician Spain (Ciudad Real), *Linares Estud. geol. Inst. Mallada* 9 17 1953.

Calymene sp. *Whittard* 1931 referred to *Nesocuretus grandior* sp. n. p. 141, *C. pompeckji* *Kobayashi* referred to *N. complanatus* sp. n. and *N. murchisoni* (Saltor) p. 150, *Whittard*.

"*Calymene*" sp. p. 115 pl. vii fig. 7, *Kielan* (1).

Calymenella Bergeron 1890—*Eohomalonotus* Reed accepted provisionally as a synonym p. 162, *Whittard*.

Calymenella marocana n. sp., *C. destombesi* n. sp. [nom. nuda], *C.* cf. *boisseldi* Berg., *C.* cf. *bayani* Trom. et Lebesq. p. 1538, *Destombes et al.*

Calymenid indet. p. 167, *Dean* (3).

Calymenid pygidium p. 270, *Anderson*.

Calymenidae—Bohemian forms summarised p. 113, *Vaněk*.

Calymenidae—*Endocrania* referred p. 41, Synhomalonotidae separated off p. 42, *Kobayashi* (1).

Calymenidae—*Pharostoma* p. 133 and *Nesocuretus* p. 141 referred, *Whittard*.

Calymenidae gen. u. sp. indet. table 1 p. 6, *Volk*.

Calymenidae see Mesoparis ord. n.

Calymenina referred to Ptychopariida p. 233, *Kobayashi* (3).

Calymeninae see *Spathacalymene* gen. n.

Camarspis convexa (Whitfield) p. 813 pl. xvi figs. 8-17, *Lochman & Hu*.

Canotaspis gen. n. [Incertae sedis, compared with *Aposolenopleura* ? *brevifrons* Rasetti] for type *C. aliena* sp. n. p. 29 pl. ii figs. 21-22 Cambrian (Middle) Argentina (Mendoza), *Poulsen Mat.-fys. Medd. danske Vid. Selsk.* 32 11 1960.

Carbonocoryphe aff. *bindemanni* K. & E. Richter p. 271 pl. xii fig. 6, *Prentice*.

Carinopyge *Maksimova* 1955 discussed and referred to *Carinopyginae* subfam. n. p. 18, *C. spinifera* sp. n. p. 19 [pl. iv figs. 18 a-r] Ordovician (Middle) U.S.S.R. (Arctic), *Balashova* Sborn. stat. paleont. biostrat. 17 [pls. in 14] 1960.

Carinopyginae subfam. n. [Monorakeidae] p. 8 for *Carinopyge* and *Anchiops*, *Balashova* Sborn. stat. paleont. biostrat. 17 [pls. in 14] 1960.

Carmon Barrande 1872 referred to *Carmonidae* fam. n. p. 112, discussed and *C. primus* B. excluded pp. 44-47, *C. mutilus* (B. 1852) p. 112 pl. xvi fig. 4, pl. xvii figs. 1-6, text-figs. 5f, 6f, 30, 31, *Kielan* (1).

Carmonidae fam. n. [Calymenacea p. 47] p. 112 for *Carmon* Barrande, *Kielan* Paleont. polon. No. 11 1960.

Carnicia referred to *Drevermanniinae* subfam. n. p. 137, *Chernysheva* et al.

Caulaspis gen. n. p. 206 for type *C. angustus* sp. n. p. 207 pl. i figs. 7-8, *C. latus* sp. n. p. 209 pl. i figs. 5-6 Cambrian (Upper) U.S.S.R. (Salair), *Rozova* Trud. Inst. geol. geophiz. AN SSSR (Sib. Otd.) 1 1960.

Caulaspis *Rozova* discussed and considered *Incertae sedis* p. 76, *C. angustus* R. holotype figd. p. 77 pl. iii fig. 16, *C. latus* R. holotype figd. p. 78 pl. iii fig. 12, *Rozova* (2).

Ceratevenkaspis parnaicus sp. n. p. 14 [pl. iv fig. 14], *C. taimyricus* sp. n. p. 15 [pl. iv figs. 9-11, 13] Ordovician (Upper), *C. pentagonus* sp. n. p. 14 [pl. iv figs. 7-86], *C. borealiscus* [C. ? b. on pl. expl.] sp. n. p. 17 [pl. iv figs. 12 a-6] Ordovician (Middle) U.S.S.R. (Arctic), *Balashova* Sborn. stat. paleont. biostrat. 17 [pls. in 14] 1960.

Ceratocephala (C.) aff. *vesiculosa* (Beyr.) p. 350, *Chupáč & Vaněk*.

Ceratocephala sp. table 1 p. 6, *Volk*.

Ceraurina *intermedia* (*Kielan* 1955) for *Ceraurus* i. K. hypostome described p. 127 pl. xxiii figs. 2-3 *Kielan* (1).

Ceraurina cf. *mitis* (*Reed*) p. 46 pl. v fig. 1, *Kobayashi* (1).

Ceraurina text-figs. 1B, C, *Whittington* (2).

Ceraurinus nordicus sp. n. p. 22 [pl. iv fig. 19, pl. v fig. 2], *C. borealiscus* sp. n. p. 23 [pl. iii fig. 31, pl. v fig. 22], *C. taimyricus* sp. n. p. 24 [pl. v figs. 3-4], *C. confluent* Barton p. 25 [pl. v fig. 1], *C. cf. tenuisculptus* Bradley p. 26 [pl. v fig. 6] Ordovician (Middle), *C. bluekaensis* sp. n. p. 26 [pl. v fig. 7], *C. icarus* (Billings) p. 27 [pl. v figs. 23 a-6], *C. marginatus* Barton p. 28 [pl. v fig. 5] Ordovician (Upper) U.S.S.R. (Arctic), *Balashova* Sborn. stat. paleont. biostrat. 17 [pls. in 14] 1960.

Ceraurinus sp. p. 30f., *Bogdanov & Chugaeva*.

Ceraurus whittingtoni text-figs. 1a-h, *Whittington* (3).

Ceraurus sp. p. 30, *Bogdanov & Chugaeva*.

Ceraurus ? sp. p. 128 pl. xxi figs. 4-7 text-fig. 35; *C. intermedius* *Kielan* referred to *Ceraurina* p. 127, *Kielan* (1).

Ceraurus text-fig. 1A, *Whittington* (2).

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Cernuolimbus gen. n. [Pteroccephalinae] p. 84 for type *C. orygmatus* sp. n. p. 85 pl. viii figs. 1, 3, 5, 8, 11 text-fig. 18 (reconstr.), *C. depressus* sp. n. p. 85 pl. viii figs. 9-10, *C. semigranulosus* sp. n. p. 86 pl. viii figs. 2, 4, 6-7 Cambrian (Upper) U.S.A. (Nevada), *Palmer* Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Champlainia rectimargo Howell — assigned *librigena* (1937 pl. 5 fig. 34) referred to *Bolaspidella* p. 29, *Poulsen* (2).

Changia Sun discussed p. 401, *Kobayashi* (4).

Changshanocephalus Sun discussed and referred tentatively to *Liopariinae* subfam. n. p. 394, *Kobayashi* (4).

Charchaia discussed p. 257, *Kobayashi* (3).

Chariocephalus — assignment to *Elviniidae* uncertain p. 64, *Palmer* (1).

Chaunoproetus aff. *carnicus* (R. Richter) p. 178 pl. xxx figs. 8-9, *Selwood*.

Cheilocephalus sp. undet. p. 815 pl. xvii figs. 11-13, *Lochman & Hu*.

Cheilocephalus spp. p. 94 pl. x figs. 13-14, *Palmer* (1).

Cheiripyge *Diener* excluded from *Brachymetopidae* p. 408, *Whittington* (1).

Cheiruridae see *Hammatocneminae* subfam. n.

Cheirurinae see *Emswella* gen. n.

Cheirurinae see *Eocheirus* gen. n.

Cheirus cf. *C. insignis* *Beyrich* p. 268, *Churkin & Langenheim*.

Cheirus *insocialis* of *Barrande* 1872 [non 1852] referred to *Actinopeltis barrandei* sp. n. p. 130, *C. neglectus* of B. 1872 *partim* [pl. 3 fig. 18] probably belongs to *A. insocialis* p. 140, *Kielan* (1).

Cheirus sp. pl. v fig. 20, *Wilson & Majewske*.

Chiawangella *Chu* 1959 [not seen] discussed p. 353, *C. pustulosa* C. text-fig. 2f, *Albertella pacifica* *Walcott* referred to C. p. 354, *Kobayashi* (4).

Chondragraulus minusensis *Lermontova* p. 201 pl. xvi figs. 4-5, *C. ujaricus* sp. n. p. 201 pl. xiv figs. 10-12, C. sp. p. 202 pl. viii fig. 9 Cambrian (Lower) U.S.S.R. (E. Sayan), *Repina* Regional Strat. S.S.S.R. 4 1960.

Chondranomocare irbinica sp. n. p. 209 pl. xvi figs. 8-9, pl. xviii figs. 1-3 Cambrian (Middle) U.S.S.R. (E. Sayan), *Repina* Regional Strat. S.S.S.R. 4 1960.

Chuangia *Walcott* 1911 discussion of referred spp. p. 361, *C. taihakuensis* *Kobayashi* listed p. 333, C. sp. p. 334; *C. nais* var. *persicum* *King* type of *Iranochuangia* gen. n. p. 363, C. n. of K. referred to *I. narghunensis* sp. n. p. 363, *Kobayashi* (4).

Chuangioides Chu 1959 [not seen] discussed p. 360, *C. punctatus* C. text-fig. 3 i, Kobayashi (4).

Chuangiopsis Sivov discussed and referred to Pagodiinae p. 370, Kobayashi (4).

Clavagnostinae subfam. n. [Agnostidae] for *Clavagnostus* Howell p. 59, *C. repandus* (Westergård) pl. i figs. 12-13, Chernysheva et al.

Clavagnostus Howell 1937 referred to Clavagnostinae subfam. n. p. 59, *C. repandus* (Westergård) pl. i figs. 12-13, Chernysheva et al.

Clavagnostus chipiquensis (Rusconi 1952) for *Culipagnostus* c. R. [reinterpreted as a pygidium] p. 9 pl. i fig. 14; *C. calensis* R. 1950 excluded from *C.* p. 10, Poulsen (2).

Cliffia lataeanae (Wilson) p. 814 pl. xcv figs. 1-7, Lochman & Hu.

Cliffia latigenae see Genus and species undetermined 3.

Coenaspis see *Pedinocephalina* gen. n.

Coignouina see *Otarion*.

Colpocoryphe see *Calymene*.

Colpocoryphe cf. *aragoi* Rouault p. 1537 ff., Destombes et al.

Colpocoryphe bohémica n. sp. [nom. nud.] p. 113, Vaněk.

Colpocoryphe grandis see *Paracolpocoryphe*.

Comluella linnarssoni (Kiaer) from Morocco p. 77, Hupé (3).

Conocephaluella n. gen. [nom. nud.] [Ellipsostreuellinae] p. 77, Hupé (3).

Coosella see Genus et sp. ind. (pygidium).

Coosia see Genus et sp. ind. (librigena).

Coosia radugini Sivov referred to *Anomocarioides* p. 7, Ivshin.

Coosina ariston (Walcott) p. 816 pl. xcvi figs. 15-20, cf. *C.* sp. undet. p. 818 pl. xcvi figs. 29-31, Lochman & Hu.

Cordania Clarke 1892 discussed with diagnosis (including presence of facial sutures) p. 408, *C. cyclurus* (Hall & Clarke 1888) lectotype selected and figured p. 409 pl. li figs. 1-7, 9-10, 12-13, 19, *C. falcata* sp. n. Devonian (Lower) U.S.A. (Oklahoma) p. 411 pl. li figs. 8, 11, 14-18, pl. lii figs. 3, 5, *C. macrobius* (Billings 1869) p. 412 pl. liii figs. 1-14, 17-18, 20-21, text-fig. 1b, *C. becraftensis* C. 1900 lectotype selected and figured with synonymy *C. hudsonica* C. (holotype figured) p. 412 pl. lii figs. 6-9, 11, 13-14, 16-19, *C. gasepiou* C. 1908 holotype figured p. 413 pl. lii figs. 1-2, C. sp. p. 413 pl. lii fig. 4; *C. gardneri* Mitchell 1922 excluded [by R. Goldring] from *C.* p. 407, *C. pulchra* Cooper & Cloud 1938 type of *Mystrocephala* gen. n. p. 413 to which is also referred *C. rara* Stumm, Whittington J. Paleont. 34 3 1960.

Cordania gardneri Mitchell type of *Australosutura* gen. n. p. 229, CAMPBELL & GOLDRING in Amos et al.

Cornovica gen. n. [Encrinuridae—forming a group with *Dindymene* and *Plasiaspis*] p. 122 for type *C. didymograpti* sp. n. for *Dindymene* sp. Whittard 1953 p. 123 pl. xvii figs. 1-11 Ordovician (Middle) Britain (Shropshire), Whittard Palaeontogr. Soc. [Monogr.] 113 (for 1959) 1960.

Cornuproetus see *Proetus*.

Cornuproetus (C.) aff. *buchi* Hawle & Corda p. 160, Cavet.

Cornuproetus cf. *holzapfeli* (Novák 1890) p. 49 pl. iii figs. 1, 5, pl. v fig. 12, *C. altaicus* sp. n. p. 50 pl. ii figs. 1-4, pl. v fig. 11 Devonian (Middle) U.S.S.R. (Altai), Maksimova Devonian and Carboniferous trilobites of the Rudny Altai 1960.

Cornuscutellum gen. n. [Scutellulidae] p. 108 (253) for type *Bronteus rhinoceros* Barrande 1872 lectotype chosen and figd. p. 109 pl. xviii figs. 2-7, pl. xix figs. 1-2, text-figs. 37-38 Devonian (Lower) Bohemia, Šnajdr Rozpr. Úst. úst. geol. 26 1960.

Coronura ? spec. p. 129 pl. i fig. 3, Bürgl.

Corynexochoidea see *Amgaspidae* fam. n.

Corynexochoidea—Triniidae referred p. 78, Chernysheva et al.

Costonia Whittard 1956 discussed p. 86, *C. ultima* (Bancroft) cast of holotype figured p. 87 pl. xii figs. 1-12, *C. elegans* sp. n. for *C.* sp. nov. Dean 1958 p. 89 pl. xiii figs. 1-6, 8-9 Ordovician (Middle) Britain (Shropshire), Dean Bull. Brit. Mus. (nat. Hist.) [Geol.] 4 4 1960.

Crepicephalus granulatus Hall & Whitfield type of *Elburgina* gen. n. p. 68, Palmer (1).

Cromus see *Encrinurus*.

Crotalocephalus myops F. Roemer 1850 p. 71 pl. vii figs. 4-9, *C.* aff. *urajubensis* Weber 1932 p. 74 pl. vii fig. 11, *C.* (hypostome) p. 75 pl. vii fig. 10, Maksimova.

Cryphops see *Phacops*.

Cryptolithus grenieri Berg. p. 1538, Destombes et al.

Cryptolithus cf. *portlocki* of Störmer 1930 probably referable to *Onnia* [q.v.] p. 138, *C.* cf. *gibbifrons* of Whittington 1938 may be *Broeggerolithus* sp. (? nov.) or *B. simplex* sp. n. p. 121, Dean (1).

Cryptolithus text-figs. 3D-F, Whittington (2).

Culipagnostus chipiquensis Rusconi reinterpreted as a pygidium and referred to *Clavagnostus* [q.v.] p. 9, Poulsen (2).

Cunningella sp. aff. *balladoolensis* Reed 1942 for *Griffithides* cf. *minor* of Frech 1906 and aff. m. of Rakusz 1932 p. 38 pl. i fig. 1-2, Bouček & Přibyl.

Cybele Lovén 1845—type taken as *C. bellatula* and *Cybelina* Reed thus an objective synonym p. 125, Whittard.

Cybele aff. *planifrons* Web., *C. sp. indet.* p. 30, Bogdanov & Chugaeva.

Cybelina Reed an objective synonym of *Cybele* p. 125, Whittard.

Cyclolorenzella gen. n. [Agraulinæ] p. 389 for type *Lorenzella quadrata* Kobayashi text-fig. 9 j, following spp. also referred *acalle* and *armata* Walcott, *tonkinensis* Mansuy, *rotundata*, *convexa*, *ogurai* Resser & Endo, *parabola* Lu, *pustulosa*, *subcylindrica*, *yentaiensis*, *kushanensis* Chu Cambrian (Middle) China and Korea, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Cyclopyge gallica Tjernvik p. 217, Tjernvik.

Cyclopyge prisca (Barrande) eye text-fig. 505a [see also *Pricyclopyge*], Müller.

Cyclopyge quadrangularis sp. n. p. 83 including *C. redivia* of Nicholson & Etheridge 1878-80 and of Reed 1904 p. 83 pl. ix figs. 1-9 text-figs. 22, 23 (pygidial ontogeny), *C. gigantea* (Barrande 1872) p. 86 pl. x fig. 2, *C. sp. a* p. 87 pl. xi fig. 7, *C. sp. b* p. 87 pl. x fig. 3, *C. sp. c* p. 88 pl. x fig. 1 Ordovician (Upper) Poland (Lysa Gora) etc., Kielan Palaeont. polon. No. 11 1960.

Cyphaspides sp. p. 350, Chlupáč & Vaněk.

Cyphaspides sp. Strnad 1956 [recte 1957] referred to *Otarion* (*O. couvinianum* sp. n. p. 340, Strnad (1).

Cyphaspis novella Barrande referred to *Harpidella* p. 199 (219), Přibyl.

Cyphaspis sp. Agrell 1939 referred to *Aulacopleura* (*A.*) *bohémica* (Přibyl) p. 105, Stubblefield.

Cyphoproetus rugosus see *Prionopeltis* sp.

Cyrtometopus ? *decanthus* Angelin restr. [cephalon excluded] lectotype selected [thorax and pygidium] and referred to *Diacanthaspis* p. 103, *C. octacanthus* A. restr. [non fig. 6] lectotype selected and referred to *Pseudosphaerzochus* p. 134, Kielan (1).

Cyrtoproetus Reed 1943 discussed with diagnosis p. 19, *C. dobsinensis* (Illés 1902) for *Griffithides* d. I. holotype figured p. 21 pl. i figs. 3-4, Bouček & Přibyl.

Cyrtosymbole (*Waribole*) cf. *aqualis* (Meyer) p. 271 pl. xii fig. 5, Prentice.

Cyrtosymbole (*Waribole*) aff. *conifera* R. & E. Richter p. 179 pl. xxix fig. 7, *C. (W.) aff. italica* (Gortani) p. 179 pl. xxix fig. 6, *C. (W.) dunhevedensis* Thomas nom. correct. type not found p. 180, *C. (W.) cf. warsteinensis* R. & E. R. p. 156, *C. (W.) calybole* cf. *neptis* R. & E. R. p. 180, *C. (W.) macrobole* aff. [no aff. on pl. expl.] *bergica* R. Richter p. 180 pl. xxix fig. 5, *C. (M.) dreverensis* R. & E. R. sens. nov. with probable synonym *C. (M.) d. longisuta* R. & E. R. p. 180 pl. xxix figs. 14-16, *C. (M.) duodecimae* R. & E. R. p. 181 pl. xxix fig. 17, *C. (M.) aff. blaz* R. & E. R. p. 182 pl. xxix figs. 12-13, *C. (M.) sp.* p. 183 pl. xxix figs. 10-11, Selwood.

Cyrtosymbole ? sp. p. 54 pl. ix figs. 5, 12 pars, Maksimova.

Cyrtosymbolidae see *Drevermanniinae* subfam. n.

Cystipina see *Phillibole*.

Daguinaspis ambroggi Hupé & Abadie *meraspis* showing undivided palpebral lobes text-fig. 2, Hupé (2).

Dainellicauda gen. n. [Dikelokcephalininae] p. 253 for type *Asaphus elegantulus* Gortani text-fig. 7c Ordovician (Middle) Himalayas, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Dalmanites longicaudatus orientalis Reed 1906 p. 9 pl. i figs. 4-5, 10 pars a [sic], text-fig. 5a, Pillet (3).

Dalmanites myops (König) for *Asaphus m. K.* 1825 with synonym *D. vulgaris* (Salter) of which selected lectotype is holotype of *D. m.* p. 280, Dean (4).

Dalmanites oklahomae Richardson referred to *Neoprobolium* and age considered Devonian (Lower) p. 53, Frederickson.

Dalmanites vulgaris (Salter) p. 117, Lawson.

Dalmanites vulgaris (Salter), *D. v. var. bituberculata* Reed p. 177, Squirrell & Tucker.

Dalmanites sp. Tschernyschow 1893 referred to *Proetus* sp. p. 47, Maksimova.

Dalmanitina mucronata (Brongniart 1822) with synonyms *D. kiaeri* Troedsson and *D. proeva grandis* (Barrande) p. 118 pl. xix fig. 4, pl. xx figs. 5-11, *D. olini* Temple 1952 p. 119 pl. xix figs. 5-6, pl. xx figs. 12-13, *D. o.* or *D. m.* [young stages] p. 120 pl. xix figs. 7-9, pl. xx figs. 1-4, *D. m.* and *D. o.* migration p. 39 ff., Kielan (1).

Dalmanitina proeva of Bordet et al. 1959 referred to *Pterygomelopus* (*P.*) *agon* p. 5n, Pillet (3).

Dalmanitina sp. text-fig. 514 pars, *D. (D.) socialis* (Barrande) text-fig. 596, Müller.

Dalmanitina sp. p. 1538, Destombes et al.

? *Dalmanitina* sp. p. 334, Cave.

Damesella paronai Airaghi listed p. 334; *D. nitida* Resser & Endo referred to *Paramenocephalites* gen. n. p. 381, Kobayashi (4).

Damesellidae discussed p. 350 [see also *Paramenoniinae* subfam. n.], Kobayashi (4).

Damesops Chu 1959 [not seen] discussed p. 352, *D. convexus* C. text-fig. 2e, *D. bilobus* (Kobayashi) for *Blackwelderia* b. K. 1942 text-fig. 2f, Kobayashi (4).

Daryagnostus [sic] *incertus* (Brögger) p. 10, Noakes et al.

Davsonia sibirica Lazarenko msc. [nom. nud.] pl. ii figs. 24-25, Chernysheva et al.

Dechenella (*Basidechenella*) *dombrowiensis* Guerich 1896 p. 339 pl. i figs. 1-5, pl. iv fig. 18, **Strnad** (1).

Dechenella minima sp. n. p. 136 pl. i figs. 6a-c Devonian (Middle) Japan (Iwate), **Okubo** Earth Science [Chikyū Kagaku] No. 4 1951.

Deckera sp. cf. *D. completa* Wilson p. 812 pl. xvi fig. 34, **Lochman & Hu**.

Decoroscutellum Šnajdr 1958 discussed p. 79 (249), *D. (Decoroscutellum)* discussed p. 80 (249), *D. (D.) haidingeri* (Barrande 1846) lectotype chosen and figd. p. 80 pl. v figs. 10-15, pl. vi figs. 1-7, pl. xxxvi fig. 11, text-fig. 26, *D. (D.) binotatum* (B. 1872) holotype figd. p. 84 pl. vi figs. 8-11, pl. vii fig. 1, text-fig. 27, *D. (D.) lepidum* l. (Bouček 1933) holotype figd. p. 85 pl. vii figs. 2-6 text-fig. 28, *D. (D.) l. eozoptatum* subsp. n. p. 87 (250) pl. vii fig. 9 text-fig. 29, *D. (D.) ascriptum* sp. n. p. 88 (250) pl. ix fig. 5, *D. (D.) uralicum* (Weber 1945) lectotype chosen and figd. p. 89 (250) pl. xxxvi figs. 5-6, *D. (Flexiscutellum)* subgen. n. for type *D. (F.) hanušii* sp. n. including *Scutellum umbelliferum* of Prantl & Přibyl 1947 *partim* (pl. 6 fig. 2) p. 90 (251) pl. vi fig. 12, pl. vii figs. 7-8, text-fig. 30 Silurian (Upper) Bohemia, *D.* nov. sp. for *Bronteus angusticeps inermis* of Weber 1945 figd. p. 177 pl. xxxiii fig. 9, **Šnajdr Rozpr. Úst. úst. geol.** 26 1960.

Delgadella caudata (Delgado) from Morocco p. 77, **Hupé** (3).

Dellea suada (Walcott) p. 813 pl. xvi figs. 22-27, **Lochman & Hu**.

Denckmannites see *Phacopidella*.

Denemarkia frontalis (Hawle & Corda 1847) lectotype selected and immature forms illustrated p. 188 (212) pl. i figs. 1-10, **Přibyl**.

Diacanthaspis decacantha (Angelin 1854) restr. for *Cyrtometopus* ? d. A. lectotype [thorax and pygidium] selected and figured p. 103 pl. xv figs. 1-3, pl. xvi figs. 2a-b, 3, pl. xvii figs. 7-8 text-fig. 27, **Kielan** (1).

Dianops see *Phacops*.

Diceratocephalinae referred to *Agraulidae* p. 391, **Kobayashi** (4).

Diceratocephalus Lu discussed and *Blackvelderia* ? *cornuta* Endo referred p. 391, **Kobayashi** (4).

Dicranopeltoides cf. *D. decipiens* (Weller) p. 268, **Churkin & Langenheim**.

Dictyites dictys (Walcott) p. 334, *D. depressa* Kobayashi p. 336, **Kobayashi** (4).

Dikelocephalus multicinctus Hall & Whitfield type of *Hederacauda* gen. n. p. 250, **Kobayashi** (3).

Dikelocephalidae see *Girvanopyge* gen. n.

Dikelocephalidina see *Birmanitidae* fam. n.

Dikelocephalinae discussed p. 249, **Kobayashi** (3).

Dikelocephalinae see *Hederacauda* gen. n.

Dikelocephalites flabelliformis Sun may belong to *Pteroccephalidae* p. 84, **Palmer** (1).

Dikelocephalopsis Poletaeva discussed and referred to *Dikelocephalininae* p. 252, *D. amassensis* P. text-figs. 8 a-b, **Kobayashi** (3).

Dikelocephalina parva sp. n. p. 252 pl. xiii figs. 27-30, *D. conica* sp. n. p. 253 pl. xiii fig. 31 Ordovician (Lower) Korea (South), **Kobayashi J. Fac. Sci. Tokyo Univ.** [2] 12 2 1960.

Dikelocephalininae discussed and taken to include *Dikelocephalina*, *Asaphopsis*, *Hungioides*, *Dactylocephalus*, *Asaphopsoides*, *Dainellicauda* gen. n. and probably *Leimitzia*, *Dikelocephalopsis* and *Temnura* p. 251, **Kobayashi** (3).

Dikelocephalininae see *Dainellicauda* gen. n.

Dindymene Hawle & Corda 1847 discussed with list of spp. p. 146, *D. fridericiaugusti* H. & C. p. 148 pl. xxviii figs. 1-2, text-fig. 96, *D. ornata* Linnarsson 1869 [may be a synonym of *D. heidingeri* Barrande p. 147] lectotype chosen and refigured with synonym *D. spinulosa* Olin 1906 refigured p. 148 pl. xxvi fig. 6, pl. xxvii figs. 3-5, pl. xxix fig. 5, pl. xxx fig. 4, text-fig. 41, *D. longicaudata* sp. n. p. 153 pl. xxvi fig. 5, pl. xxviii fig. 5, pl. xxix fig. 4, pl. xxx figs. 1-3, text-fig. 43 Ordovician (Upper) Poland and Sweden, *D. plasi* sp. n. p. 151 pl. xxix figs. 1-3 text-fig. 42 Ordovician (Middle) Bohemia; *D. pulchra* Olin type of *Eodindymene* gen. n. p. 144, *D. cornuta* O. a nom. dub., *D. venusta* O. a synonym of *Raphiophorus gratus* (Barrande), *D. minuta* Reed 1931 a nom. dub. and may be part of a *Trinodus* p. 147, **Kielan Palaeont. polon. No. 11** 1960.

Dindymene Hawle & Corda 1847 diagnosis p. 121, considered to form with *Plasiopsis* and *Cornovica* gen. n. a compact group of Encrinuridae, *D.* sp. Whittard 1953 referred to *C. didymographi* sp. n. p. 123, **Whittard**.

Dindymeninae subfam. nov. [recte Přibyl 1953] for *Dindymene* and *Eodindymene* gen. n. pp. 52, 143, *Plasiopsis* excluded p. 144, **Kielan** (1).

Dindymeninae see *Eodindymene* gen. n.

Dinesidae Lermontova discussed with synonym *Proerbididae* Hupé p. 139, **Suvorova**.

Dinesidae see *Tumulina* gen. n.

Dionide subrotundata sp. n. p. 161 pl. xxxi fig. 4, pl. xxxii figs. 1-3, pl. xxxiii fig. 7, pl. xxxv fig. 5, text-fig. 46, *D. decorata* sp. n. p. 163 pl. xxxi figs. 1-3 text-fig. 47 Ordovician (Upper) Scandinavia and Poland, **Kielan Palaeont. polon. No. 11** 1960.

Diagnostos jarillensis Rusconi 1952 ? referred cephalon p. 10 pl. i fig. 9, **Poulsen** (2).

Diaplatokephalus referred to *Proaplatokephalidae* fam. n. p. 33, **Rozova** (2).

Dokimocephalidae—*Acrocephalitinae* referred p. 383, **Kobayashi** (4).

Dokimocephalus Walcott discussed, *D. pernaus* (W.) holotype figured with possible synonym *D. gregori* W. p. 95 pl. xi figs. 18, 21 [sic], **Palmer** (1).

Dokimocephalus sp. p. 813 pl. xvi fig. 37, **Lochman & Hu**.

Dolerolenidae see *Sajanaspis* **gen. n.**

Doryagnostus see *Daryagnostus*.

Dorypyge richthofeni Dames discussed with several Resser & Endo 1937 and Resser 1942 spp. as synonyms p. 347, *D. r. laevis* Walcott holotype figured with synonyms p. 348 pl. xix figs. 19-25, *laivuensis* and *manchuriensis* Kobayashi and *perconveza* R. & E. also subsp. of *r.* p. 347, *D. ? grandispinosa* R. & E. p. 349, *D. taihakuensis* and *D. cf. t.* K. listed p. 334, **Kobayashi** (4).

Dorypygidae discussed p. 343, *Pseudokoldinioidia* referred p. 349, **Kobayashi** (4).

Drepanura premesnili Bergeron listed p. 333, **Kobayashi** (4).

Drevermannia referred to *Drevermanniinae* subfam. n. p. 137, **Chernysheva et al.**

Drevermanniinae subfam. n. [Cyrtosymbolidae] p. 137 for *Drevermannia*, *Eodrevermannia*, *Carnicia*, *Palpebralia*, *Formonia*, **Maksimova** Principles of Palaeontology. Arthropods—Trilobitomorpha and Crustaceans 1960.

Dreyfussina see *Phacopidina*.

Drumaspis—assignment to *Elviniidae* uncertain p. 64, **Palmer** (1).

Dulanaspis Chugaeva excluded from *Scutellulidae* p. 53, **Snaajdr**.

Dunderbergia Walcott 1924 discussed and referred to *Elviniidae* p. 65, ventral cephalic sutures text-fig. 8 c, *D. bigranulosa* sp. n. with possible librigenal dimorphism and a pathological pygidium p. 66 pl. v figs. 10-13, 15-23, *D. nitida* (Hall & Whitfield) [excluding pygidium of Walcott 1925 pl. 16 figs. 6-7 to *Housia*] lectotype selected and figured with synonym *D. simulator* (H. & W.) holotype figured p. 67 pl. iv figs. 14-21, 23-24, *D. polybothra* sp. n. p. 67 pl. v figs. 1-4, 6-7, 9, 14 text-fig. 9 (reconstr.), *D. variogramula* Palmer p. 68 pl. iv figs. 22, 25, 28-29, *D. v. ?* pl. iv fig. 26 Cambrian (Upper) U.S.A. (Nevada), *D. quadrata* Kobayashi [of which *D. v.* may be a synonym] holotype figured p. 68 pl. iv fig. 27; *D. maculosa* (H. & W.) [type of *Megadunderbergia*] holotype figured pl. v fig. 5, *D. pustulosa* (H. & W.) holotype figured pl. v fig. 8, *D. canadensis* K. and *D. conveza* K. should all be restricted to type specimens and considered indeterminate p. 66, *D. halli* Resser referred to *Housia* p. 75, *D. granulosa* (H. & W.) type of *Elburgia* **gen. n.** p. 68, **Palmer** Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Dysplanus see *Iliaenus*.

Ectillaenus cf. *leptopleura* (Holm) listed p. 30, **Kielan** (1).

Ectillaenus sarkaensis (Novak) text-fig. 560b, **Müller**.

Edelsteinaspidae discussed p. 123, **Suvorova**.

Edelsteinaspidae—*Laticephalus* Pokrovskaya referred p. 209, **Repina**.

Edelsteinaspis gracilis Lerm. MS pl. xiv fig. 18 pars 6, **Suvorova**.

Edelsteinaspis ornatus Lermontova p. 208 pl. viii figs. 10-11, pl. xiv figs. 7-9, **Repina**.

Elitura Resser & Endo discussed and referred to *Monocephalitinae* subfam. n. p. 382; *E. quadrata* E. excluded, **Kobayashi** (4).

Elasmaspis **gen. n.** [Monorakeinae] p. 1030 for type *E. speciosa* sp. n. p. 1031 pl. figs. 1 (I-V) Ordovician (Upper) U.S.S.R. (Siberia), **Kramarenko** Doklady Akad. Nauk SSSR (ns) 109 6 1956.

Elasmaspis Kramarenko referred to *Monorakeidae* (*Elasmaspisinae*) subfam. n. p. 7, **Balashova** (1).

Elasmaspisinae subfam. n. [Monorakeidae] p. 7 for *Elasmaspis* Kramarenko, **Balashova** Sborn. stat. paleont. biostrat. 17 [pls. in 14] 1960.

Elatelimbus **gen. n.** [Acrocephalitidae] for type *E. gammatus* sp. n. p. 213 pl. xviii figs. 9-11 Cambrian (Middle) U.S.S.R. (E. Sayan), **Repina** Regional Strat. S.S.S.R. 4 1960.

Elburgia **gen. n.** [Elviniidae] p. 68 for type *Crepicephalus granulosa* Hall & Whitfield 1877 holotype refigured p. 69 pl. vi figs. 16-17, 19, *E. guinnensis* (Resser) for *Taenicephalus* q. R. holotype refigured p. 69 pl. vi figs. 11-13, 15, text-fig. 10 (reconstr.) Cambrian (Upper) U.S.A. (Nevada); *Elvinia* sp. of Palmer & Hazzard 1956 belongs to *Elburgia*, **Palmer** Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Elganellus Suvorova discussed p. 46, *E. probus* S. p. 47 pl. iii figs. 5-7 text-fig. 14, *E. penus* S. p. 48 pl. iii figs. 8-16 text-figs. 15-16, *E. acceptus* S. p. 52 pl. iii figs. 17-18, pl. iv figs. 1-5, text-figs. 17-18, *E. elegans* S. with young stages p. 55 pl. iv figs. 6-19, pl. v figs. 1-13, text-figs. 19-20, **Suvorova**.

Ellipsocephalidae discussed p. 61, **Suvorova**.

Ellipsocephalinae discussed p. 63, **Suvorova**.

Ellipsocephalus hoffi (v. Schlotheim) text-fig. 531, **Müller**.

Ellipsocephalus uniformis n. sp. [nom. nud.], *E. sp.* p. 81, **Hupé** (3).

Ellipsuella n. **gen.** [nom. nud.] [*Ellipsostruella*] p. 77, *E. tangarfae*, *E. kautskii* n. spp. [nom. nuda] p. 81, **Hupé** (3).

Elvinia Walcott 1924 discussed, *E. roemeri* (Shumard) with all Resser's 1937, 1938, 1942 spp. of *E.* [except 2 following] as synonyms p. 70 pl. vi fig. 7 text-fig. 11 (reconstr.), *E. granulata* R. holotype figured with synonym *E. ruedemanni* R. p. 71 pl. vi fig. 4, *E. hamburgensis* (R.) for *Parairvingella* h. R. (holotype figured) may be a synonym of *E. g.* p. 71 pl. vi fig. 5, *E. ?* sp. p. 71 pl. vi fig. 6; *E. sp.* of Palmer & Hazzard 1956 referred to *Elburgia* **gen. n.** p. 69, **Palmer** (1).

Elvinia roemeri (Shumard) with immature stages p. 814 pl. xvi figs. 38-47, **Lochman & Hu.**

Elviniella gen. n. [Elviniidae] p. 71 for type *E. laevis* sp. n. p. 72 pl. vi figs. 9-10, *E. sp.* (may belong to *E. l.*) pl. vi figs. 8, 14 Cambrian (Upper) U.S.A. (Nevada), **Palmer** Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Elviniidae Kobayashi discussed and taken to include *Elvinia*, *Elviniella* and *Elburgia* gen. n., *Dunderbergia*, *Irvingella*, relations discussed p. 64, **Palmer** (1).

Elviniidae see *Elburgia* gen. n.

Elviniidae see *Elviniella* gen. n.

Elviniidae see Hypostomes A-E.

Emsurella gen. n. [Cheirurinae] for type *E. humila* [humilla on pl. expl.] sp. n. p. 28 pl. iii figs. 7-9, *E. ? laevigata* sp. n. p. 30 pl. iii figs. 6, 10-11 Cambrian (Upper) U.S.S.R. (Salair), **Rozova** Trud. Inst. geol. geophiz. AN SSSR (Sib. Otd.) 5 1960.

Emsurina Sivov discussed p. 24, *E. minuta* sp. n. p. 25 pl. iii figs. 1-2, *E. fulita* sp. n. p. 26 pl. iii figs. 3-5 Cambrian (Upper) U.S.S.R. (Salair), **Rozova** Trud. Inst. geol. geophiz. AN SSSR (Sib. Otd.) 5 1960.

Enorinuridae discussed p. 120; *Dindymene*, *Plasiopsis* and *Cornovica* gen. n. form a compact group p. 121, **Whittard.**

Enorinuridae see *Cornovica* gen. n.

Enorinurus (Cromus) beaumonti (Barrande) p. 268, **Churkin & Langenheim.**

Enorinurus punctatus Emmrich text-fig. 587, **Müller.**

Enorinurus punctatus (Wahlenburg), *E. cf. variolaris* Brongniart, *E. sp.* p. 177, **Squirrell & Tucker.**

Enorinurus sp. p. 38, **McKerrow & Campbell.**

Enorinurus sp. nov. [undeser.] p. 119, **Lawson.**

Endocrania Kobayashi referred to Calymenidae and compared with *Pychemetopus* p. 41, **Kobayashi** (1).

Endymionia kazachstanica Balashova [not seen] pl. iv fig. 6, **Chernysheva et al.**

Entomostracites granulatus Wahlenberg 1818 partim (pl. 2 fig. 4*) refigured and referred to *Leonaspis olini* [q.v.] p. 101 [see also *Tretaspis granulata*], **Kielan** (1).

Eobronteus Reed 1928 discussed p. 53 (245), *E. reedi* Sinclair type of *Protobronteus* gen. n. p. 55, **Šnajdr.**

EOcheirus gen. n. [Cheirurinae] p. 16 for type *E. salavicus* sp. n. p. 18 pl. i figs. 14-16, 18-19, *E. subtilis* sp. n. p. 20 pl. i fig. 17, pl. ii figs. 1-3, *E. probus* sp. n. p. 22 pl. ii figs. 4-9 Cambrian (Upper) U.S.S.R. (Salair), **Rozova** Trud. Inst. geol. geophiz. AN SSSR (Sib. Otd.) 5 1960.

Eochuangiinae discussed p. 359, **Kobayashi** (4).

Eocrypophops see *Phacops*.

Eodindymene gen. n. [Dindymeninae] p. 144 for type *Dindymene pulchra* Olin 1906 lectotype selected and refigured including *D. sp.* of *O. partim* (pl. 1 fig. 26) refigured p. 144 pl. xxvii figs. 1-2, pl. xxviii figs. 3-4, pl. xxix fig. 6, text-figs. 9a, 40 Ordovician (Upper) Sweden and Poland, **Kielan** Palaeont. polon. No. 11 1960.

Eodiscid ? [called *Serrodiscus* ? by C. J. Stubblefield p. 105] p. 103, **Bassett in Bassett & Walton.**

Eodrevernmannia referred to Drevernmanniinae subfam. n. p. 137, **Chernysheva et al.**

Eohomalonotid ? pp. 141, 168, **Cavet.**

Eohomalonotus Reed 1918 accepted provisionally as a synonym of *Calymenella* p. 162, **Whittard.**

Eorobergia sp. p. 30, **Bogdanov & Chugaeva.**

Eosaukia Lu discussed p. 404, **Kobayashi** (4).

Erbia Lermontova discussed p. 141, *E. granulosa* g. L. lectotype selected p. 143 pl. xiii figs. 1-3 text-fig. 46, *E. g. astricta* subsp. n. p. 145 pl. xiii figs. 4-8 text-fig. 47 Cambrian (Middle) U.S.S.R. (Siberian Platform), **Suvorova** Trud. paleont. Inst. S.S.S.R. 84 1960.

Erbia granulosa Lermontova p. 204 pl. xv figs. 7-8, *E. sibirica* (Schmidt) p. 204 pl. viii figs. 12-13, pl. ix fig. 7, pl. xv fig. 4, pl. xvi figs. 6-7, pl. xvii figs. 12-13, **Rapina.**

Erdelia gen. n. [Asaphinae] (nom. n. for *Maja* Lomovitskaya 1955) for type *M. subseculata* L. 1955 p. 145, *E. venusta* (L.) pl. iii fig. 6 Tremadoc U.S.S.R. (W. Siberia), **Lomovitskaya** Principles of Palaeontology. Arthropods—Trilobitiforms and Crustaceans 1960.

Eremiproetus see *Proetus*.

Eremiproetus cf. eremita (Barrande 1852) for *Proetus* sp. Tschernyschew 1893 refigured p. 53 pl. i fig. 8, **Maksimova.**

Euloma kelleri Balashova [nom. nud.] pl. x fig. *E. kazachstanica* B. [nom. nud.] pl. x fig. 5, **Chernysheva et al.**

Euloma new species [like *E. geinitzi*] p. 43, **Lochman-Balk.**

Eurekiinae Hupé may belong to Monkaspidae, *Apatokephaloides* tentatively included p. 237, **Kobayashi** (3).

Eurudagnostus referred to Geragnostidae p. 234, **Kobayashi** (3).

Evenkaspis norilskensis sp. n. p. 13 [pl. iv figs. 15-17] Ordovician (Middle) U.S.S.R. (Arctic), **Balashova** Sborn. stat. paleont. biostat. 17 [pls. in 14] 1960.

Eymekops Resser & Endo discussed, *E. expansus* (Kobayashi) for *Lioparia* s. K. p. 395 pl. xix fig. 17, *E. carinata* sp. n. p. 396 pl. xxi fig. 11 [sic] Cambrian (Middle) S. Korea, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Flexicalymene cambrensis (Salter) p. 157, *F. planimarginata* (Reed) p. 158, Whitford.

Flexicalymene incerta (Barr. 1846) pl. x and *F. declinata* (Hawle & Corda 1847) so referred p. 113, Vaněk.

Flexicalymene sp. p. 334, Cave.

Flexiscutellum subgen. n. see *Decoroscutellum*.

Forbesia brevifrons Angelin referred to *Ogmocnemis* gen. n. p. 69, Kielan (1).

Formonia referred to *Drevermanniinae* subfam. n. p. 137, Chernysheva et al.

Gallagnostus solitariensis Rusconi reinterpreted as a pygidium and referred to *Phoidagnostus* [q.v.] p. 14, Poulsen (2).

Gentilaspis n. gen. [nom. nud.] [Olenellid] p. 76, Hupé (3).

Gentilaspis tuberosissima Hupé [nom. nud.] text-fig. 4b, Hupé (2).

Geragnostella cambria sp. n. p. 342 pl. xix fig. 8 Cambrian (Upper) S. Korea, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Geragnostidae discussed p. 233, *Rudagnostus* and *Eurudagnostus* referred p. 234, Kobayashi (3).

Geragnostus considered generically separable from *Homagnostus* to which *G. tumidosus* (Hall & Whitfield) is transferred p. 62, Palmer (1).

Geragnostus obsoletus sp. n. p. 342 pl. xxi figs. 16-17 Cambrian (Upper) Korea (South), Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Geragnostus wimani Tjernvik p. 217, Tjernvik.

Geragnostus sp. p. 58 pl. i fig. 4 text-fig. 12, Kielan (1).

Geragnostus (*Micragnostus*) [sp.] straddling Trempealeau/Tremadoc junction in Montana p. 45, Lochman-Balk.

Girvanopyge gen. n. [? Dikelocephalidae] p. 254 for type *Lichopyge*? *problematica* Reed 1906 text-fig. 7e Ordovician (Upper) Britain (Scotland), Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Glaphyraspis Resser 1937—*Raaschella* Lochman 1938 a synonym p. 279, RASETTI in Harrington et al. [omitted Z.R. 96 11].

Glaphyraspis occidentalis Lochman for *Raaschella* o. L. p. 815 pl. xvii figs. 1-8, Lochman & Hu.

Glaphyraspis tetonensis Resser type of *Americare* gen. n. p. 828, Lochman & Hu.

Glyptagnostus reticulatus r. (Angelin) and *G. r. angelini* (Resser) stratigraphic positions in U. S. A., G. n. sp. [undeser.] p. 1941, Palmer (2).

Goycoia Rusconi 1950 discussed and type designated *G. tellecheai* R. 1950 p. 30 pl. ii fig. 24, *G. brevicauda* sp. n. p. 31 pl. ii fig. 23, *G. pecoralis* sp. n. p. 32 pl. ii fig. 25 Cambrian (Middle) Argentina (Mendoza), Poulsen Mat.-fys. Medd. danske Vid. Selsk. 32 11 1960.

Grandicollus sp. p. 334, Kobayashi (4).

Granularia Poletayeva diagnosis, *G. protolenorum* Lermontova 1951 neotype selected p. 162 pl. xiv figs. 17-18, pl. xv, pl. xvi, text-fig. 54, *G. bidjensis* P. [nom. nud.] p. 167, Suvorova.

Granularia obrutchevi Poletaeva p. 209 pl. xiv figs. 1-6, Repina.

Granulariidae discussed p. 162, Suvorova.

Griffithides Portlock 1843 discussed p. 30, *G. (Bollandia)* Reed 1943 so referred and discussed p. 30, *G. (B.) rozlozniki* Rakusz 1932 lectotype selected and figured p. 31 pl. vi figs. 1-3; *G. dobsinensis* Illés referred to *Cyrtoproetus* p. 21, *G. cf.* and aff. *minor* see *Cunningella*, Bouček & Přibyl.

Griffithides verrucosus Gemmellaro referred to *Neoproetus* p. 4, Ruggieri.

Gröncallia may belong to *Pteroccephaliidae* p. 80, Palmer (1).

Grossia subgen. n. see *Leonaspis*.

Hagiorites Kobayashi discussed with implied reference to *Birmanitidae* fam. n. p. 256, Kobayashi (3).

Hammatocneminae subfam. n. [Cheiruridae] for *Hammatocnemis* gen. n. p. 141, discussed p. 48, Kielan Palaeont. polon. No. 11 1960.

Hammatocnemis gen. n. [Cheiruridae (*Hammatocneminae*)] p. 141 (affinities discussed p. 48) for type *H. tetrasulcatus* sp. n. p. 141 pl. xxv fig. 3, pl. xxvi figs. 2-4, pl. xxvii figs. 6-8, text-figs. 38, 39 (ontogeny of cranidium) Ordovician (Upper) Poland (Lysa Gora), Kielan Palaeont. polon. No. 11 1960.

Haniwa quadrata Kobayashi p. 335, Kobayashi (4).

Harpes (H.) *radians* r. Reinh. Richter 1863 p. 110, H. (H.) r. subsp. indet. pl. xii fig. 9, H. (H.) r. *asinus* Schwarzbach 1950 p. 110, Alberti.

Harpes reticulatus Hawle & Corda 1847 lectotype chosen p. 24 pl. vi figs. 5a-6, H. r. var. *altaica* Weber holotype figured p. 26 pl. i figs. 1a-6, Maksimova.

Harpes reticulatus Hawle & Corda p. 350, Chlupáč & Vaněk.

Harpes ruderalis Hawle & Corda text-fig. 574, H. *ungula* Sternberg text-fig. 575, Müller.

Harpes sp. p. 31, Bogdanov & Chugaeva.

Harpes sp. p. 350, Tomezykova.

Harpes sp. indet. p. 335, **Strnad** (1).

Harpidella McCoy 1849 nov. emend. discussed p. 218, *H. novella* (Barrande 1852) for *Cyphaspis* n. B. p. 219 pl. iii figs. 5-6, *H. megalops* (McCoy) with possible synonym *H. elegantula* (Lovén), *H. christyi* (Hall), *H. girardeauensis* (Shumard) all so referred p. 219, **Prübyl**.

Hawleia see *Placoparia*.

Hebediscus lemontovae sp. n. p. 174 pl. vii figs. 4-6 Cambrian (Lower) U.S.S.R. (E. Sayan), **Repina** Regional Strat. S.S.S.R. 4 1960.

Hederacauda gen. n. [Dikelocephalinae] for type *Dikelocephalus multineatus* Hall & Whitfield p. 250 text-figs. 8 c-d Cambrian (Upper) U.S.A., **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Hemigraspis desiderata, *H.* sp. table 1 p. 6, **Volk**.

Hibbertia sanctacrucensis sp. n. p. 157 pl. xxxiv figs. 4-6, pl. xxxv fig. 8, text-fig. 44 Ordovician (Upper) Poland (Lyse Gora), *H.* sp. p. 159 pl. xxxii fig. 7, **Kielan** Palaeont. polon. No. 11 1960.

Hicksia elvensis Delg.—*Bonniella* ? *hispanica* Richter & Richter belongs p. 82, **Hupé** (3).

Hintzeia glabella sp. n. p. 262 pl. xiii fig. 32 Ordovician (Lower) Korea (South), **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Holacephalus tenerus (Walcott) with immature stages including protaspides p. 823 pl. xeviii figs. 1-52, **Lochman & Hu**.

Holmiinae see *Sinskia* gen. n.

Homagnostus Howell discussed and considered generically separable from *Agnostus* and *Geragnostus* p. 62, *H. tumidosus* (Hall & Whitfield) transferred from *G.* p. 63 pl. iv figs. 1-2, *H. obesus* (Belt) p. 63 pl. iv figs. 7-9; *H. acutus* Kobayashi referred with query to *Pseudagnostus* p. 62, **Palmer** (1).

Homalonotidae see *Mesoparia* ord. n.

Homalonotus barratti Woodward may be a Phacopid p. 104, **Stubblefield**.

Homalonotus inexpectatus Barrande a synonym of *Brongniartella platynotus* (Dalman) p. 118, **Kielan** (1).

Homalonotus knightii König p. 120, **Lawson**.

Homalonotus knightii König p. 177, **Squirrell & Tucker**.

Homalonotus sp. p. 350, **Tomczykowa**.

Housia Walcott discussed p. 74, incomplete separation of last thoracic segment from pygidium described, ventral cephalic sutures text-fig. 8 b, *H. halli* (Resser) for *Dunderbergia* h. R. holotype figured p. 75 pl. vii fig. 8, *H. ovata* sp. n. with transitory pygidia p. 75 pl. vii figs. 1-7, 9 text-fig. 12 (reconstr.) Cambrian (Upper) U.S.A. (Nevada), **Palmer** Prof. Pap. U.S. geol. Surv. No. 334-C 1960

Housia sp. p. 814 pl. xevi figs. 1-2, **Lochman & Hu**.

Housiidae discussed and taken to include *Housia*, *Prehousia* and *Parahousia* gen. n., and possibly *Morosa* gen. n., "*Aphelaspis*" *tumifrons* Resser, *Acrocephalaspis* and *Ullaepis* p. 74, **Palmer** (1).

Housiidae see *Morosa* gen. n.

Housiidae see *Parahousia* and *Prehousia* gen. n.

Howelluella n. gen. [nom. nud.] [Strenuellinae] p. 77, **Hupé** (3).

Hsiaoshia Endo discussed p. 408, **Kobayashi** (4).

Hukasawaia Kobayashi discussed p. 244, *H. cylindrica* K. text-fig. 6 g; *Portentosus* is probably allied to *H.* p. 243, **Kobayashi** (3).

Hungioidea graphicus, ? *H.* table 1 p. 6, **Volk**.

Hystricurinae discussed p. 382, **Kobayashi** (4).

Hystricurus megalops Kobayashi 1934 p. 235 pl. xiii fig. 20, *H.* cf. *m.* p. 236 pl. xiii fig. 21, *H. calvus* sp. n. p. 236 pl. xiv figs. 5-6 Ordovician (Lower) Korea (South), **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Hystricurus wilsoni sp. n. for *H.* aff. *flectimembrus* of Hallam 1958 p. 457 pl. xv figs. 1-14 text-fig. 6 (reconstr.), Ordovician (Lower) Spitsbergen, **Gobbett** Geol. Mag. 97 6 1960.

Hystricurus sp. p. 451, **Gobbett & Wilson**.

Iddingsia Walcott discussed with relations to *Plataspella* analysed p. 95, *I. robusta* (W.) holotype figured with synonym *I. nevadensis* Resser holotype figured p. 96 pl. xi figs. 13-16, *I. similis* (W.), *I. utahensis* R., *I. missouriensis* R. with synonym *I. crassimarginata* R. diagnoses; *I. s.* of Bell et al. 1952 partim (pl. 31 fig. 2) referred to *Plataspella* p. 96, *I. ? quinnensis* R. referred to *Sigmocheilus* gen. n. p. 90, **Palmer** (1).

Illaenide indét. p. 1537, **Destombes et al.**

Illaenopsis ? *acuticaudata* Hicks referred to *Seleneceme* p. 118, **Whittard**.

"*Illaenus*" *angelini* Holm 1882 pl. xiv fig. 6, "*I.*" cf. a. H. p. 95 pl. xiv figs. 7-9, "*I.*" sp. p. 95 pl. xiv fig. 5, **Kielan** (1).

Illaenus glaberrimus (Hawle & Corda 1847) considered nom. dub. p. 209, **Šnajdr**.

Illaenus lacertus with muscle scars text-figs. 4g, h, **Whittington** (3).

Illaenus cf. *latiaziaatus* Raym., *I.* aff. *marginalis* R., *I.* sp. p. 30, **Bogdanov & Chugneva**.

Illaenus loreti, *I.* sp. table 1 p. 6, **Volk**.

Illaenus (*Dysplanus*) *namshimensis* Reed 1915 p. 11 pl. i figs. 7, 10 *pars* b [sic], text-figs. 2, 5c, **Pillet** (3).

Illaenus sp. p. 1539, **Destombes et al.**

Illeenus sp. p. 177, Squirrel & Tucker.

Inouyella discussed and referred to *Liopariinae* subfam. n. p. 391, Kobayashi (4).

Inouyina subquadratica sp. n. p. 215 pl. iv figs. 3-4 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Inouyops Resser 1942 a synonym of *Paragraulus* p. 385, Kobayashi (4).

Iranochuangia gen. n. [Leioestegiinae] p. 363 for type *I. persicum* for *Chuangia nais* var. *persicum* King 1937 text-fig. 3k, *I. narghunensis* sp. n. for C. n. of K. 1930 p. 363 Cambrian (Upper) Iran, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Irvingella Ulrich & Resser 1924 discussed and referred to *Elviniidae* p. 72, *I. (Parairvingella) Kobayashii* a recognisable taxon, *I. (P.) angustilimbatus* K. holotype figured with synonym *P. intermedia* R. p. 73 pl. vi figs. 2-3, *I. (P.) eurekaensis* K. holotype figured p. 74 pl. vi fig. 1, Palmer (1).

Isotelus gigas text-fig. 4b, Whittington (3).

Isotelus cf. *mazimus* Locke p. 30, Bogdanov & Chugaeva.

Isotelus cf. *platyrhachis* Steinhardt 1874 p. 251 pl. xiv figs. 5-7, Henningsmoen.

Isotelus sp. large articulated specimen p. 18 fig. 1, Amesen & Ham.

Isaefenia n. gen. [nom. nud.] [Olenellid] p. 76, Hupé (3).

Ithyektyphus Shaw 1956 discussed and relations to *Modocia* analysed p. 829, *I. tetonensis* (Miller) type material discussed and holotype figured p. 830 pl. e figs. 15-27, *I. nevadensis* (Palmer) for *M. n. P.* p. 830, *I. tipperaryensis* (M.) holotype figured pl. e figs. 1-3, Lochman & Hu.

Iwayaspis nom. nud. p. 257, Kobayashi (3).

Jakutidae Suvorova diagnosis and division into Jakutinae and Malykaninae subfam. n. p. 84, Suvorova.

Jakutidae fam. nov. [recte Suvorova 1959] p. 72, Chernysheva et al.

Jakutidae see *Manaspis* gen. n.

Jakutinae subfam. nov. [Suvorova] taken to include *Jakutus*, *Bathyriscellus*, *Judaiella*, *Parapoliella*, *Lenaspis* and *Bathyriscopsis* gen. n. p. 86, Suvorova.

Jakutus Lermontova discussed and referred to Jakutinae, *J. mirus* sp. n. p. 86 pl. viii figs. 1-2 text-fig. 27 Cambrian (Lower) U.S.S.R. (Siberian Platform), *J. fuxovi* Galimova [not seen] listed p. 86, Suvorova Trud. paleont. Inst. S.S.S.R. 84 1960.

Josina gen. n. [Menomoniidae] p. 830 for type *J. festiva* sp. n. p. 831 pl. e figs. 28-35 Cambrian (Middle) U.S.A. (Wyoming), Lochman & Hu J. Paleont. 34 5 1960.

Judaiella Lermontova referred to Jakutinae p. 86, Suvorova.

Judaiella inepta sp. n. p. 206 pl. i figs. 1-3 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Kabutocrania gen. n. [Tingocephalinae] p. 358 for type *K. fossula* sp. n. p. 359 pl. xx fig. 19 text-fig. 2i Cambrian (Upper) S. Korea, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Kainella euryraxis Kobayashi p. 245 text-fig. 6h; *K. lohanpoensis* Sheng referred to *Aotiaspis* gen. n. p. 247, Kobayashi (3).

Kainellina Poletayeva 1945 [not seen] [Remopleurididae] diagnosis p. 116, *K. kousnezkiensis* P. pl. iv figs. 27-28, Chernysheva et al.

Kainellinae see *Aotiaspis* gen. n.

Kameschkoviella [Kameschkoviella on pl. and pl. expl.] gen. n. [Protolenidae] for type *K. zhuravlevae* sp. n. p. 176 pl. xi figs. 8-10 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Kaolishania Sun 1924 list of spp., *K. granulosa* Kobayashi 1933 p. 355 pl. xx figs. 8-12, pl. xxi fig. 14, *K. ? latius* sp. n. for aff. *K. ? orientalis* of K. 1935 p. 356 pl. xxi fig. 19 Cambrian (Upper) S. Korea, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

? *Kaolishaniella transita* Sun p. 356 pl. xx figs. 13-16, Kobayashi (4).

Kaolishaniidae discussed and classified into Kaolishaniinae and Tingocephalinae p. 354, Kobayashi (4).

Kendallina eryon (Hall) p. 811 pl. xcv figs. 24-30, Lochman & Hu.

Kettneraspis see *Leonaspis*.

Kindbladina Frederickson 1948 discussed, *K. affinis* (Walcott) holotype figured with synonyms *Berkeia nevadensis* (holotype figured) and *B. comes* Resser p. 97 pl. xi figs. 17, 19-20, Palmer (1).

Kingstonella subgen. n. see *Kingstonia*.

Kingstonia Walcott discussed p. 66 and classified into *K. (Kingstonia)* and *K. (Kingstonella)* [subgen. n.] for type *K. walcotti* Resser p. 70; *K. gibbosa* Lermontova, *K. globosa*, *K. paichinensisformis*, *K. salairica* Sivov spp. referred to *Parakoldinia* gen. n. p. 62, Rozova Trud. Inst. geol. geophiz. AN S.S.S.R. (Sib. Otd.) 5 1960.

Kingstonia see Genus and species undet. 3.

Kingstoninae discussed p. 61 ff., Rozova (2).

Kjerulfia adaoides, *K. serksi* n. spp. [nom. nuda] p. 81, Hupé (3).

Kokuria discussed and referred to *Liopariinae* subfam. n. p. 391, Kobayashi (4).

Kolbinella gen. n. [Anomocaridae] for type *K. prima* sp. n. p. 210 pl. iv figs. 1-2 Cambrian (Lower) U.S.S.R. (E. Sayan), *Repina* Regional Strat. S.S.S.R. 4 1960.

Koldiniella Sivov discussed and may belong to *Tainiidae* p. 397, *Kobayashi* (4).

Koldinioides [sic] sp. p. 335, *Kobayashi* (4).

Kolihapeltis Prantl & Pflügl 1947 discussed p. 163 (257), *K. parabolina* (Barrande 1882) lectotype chosen and figd. with synonym *Scutellum* (*K.*) *lanceolatum* P. & P. holotype figd. p. 165 pl. xxxi figs. 6-11 text-figs. 51, 52, *K. perloua* (B. 1872) holotype figd. p. 167 pl. xxxi fig. 5, *K. linguata* (Novák 1884) holotype figd. p. 168 pl. xxxi figs. 12-13, *K. chlupáči* sp. n. for *S.* (*K.*) l. of P. & P. 1947 figd. Devonian *Čečelovskia* (Bohemia) p. 169 (258) pl. xxxi fig. 14, *K. brevifrons* (B. 1852) with synonym *Bronteus acharyi* B. lectotypes of both chosen and figd. p. 170 pl. xxxii figs. 1-4 text-fig. 53, *K.* sp. p. 172 pl. xxxi fig. 15, *Šnajdr Rozpr. Úst. úst. geol.* 26 1960.

Komaspidae discussed and *Irvingella* removed p. 73, *Palmer* (1).

Komaspidae see *Terechaspis* gen. n.

Kootenia abacania Poltaeva p. 199 pl. x figs. 10-11, *K.* sp. p. 199 pl. xv figs. 1-3, *Repina*.

Kooteniella slatkovskii (Schmidt) p. 198 pl. ix figs. 4-6, pl. xv figs. 11-12, pl. xvi figs. 1-3, *K.* sp. p. 199 pl. viii figs. 14-15, *K.* cranidium pl. ix fig. 1 *pars*, *Repina*.

Koptura ? sp. p. 212 pl. xviii fig. 8, *Repina*.

Korupis spinus Kobayashi p. 262 pl. xiii figs. 16a-b text-fig. 11, *Protolomomys punctatus* *K.* may belong to *K.* p. 262, *Kobayashi* (3).

Kormagnostus Resser 1938 discussed, *K. ? pro-pinquus* sp. n. p. 11 pl. i fig. 10 Cambrian (Middle) Argentina (Mendoza), *Foulsen Mat.-fys. Medd. danske Vid. Selsk.* 32 11 1960.

Kormagnostus simplex Resser p. 822 pl. xcix figs. 5-31, *K.* sp. undet. p. 799, *Lochman & Hu*.

Kosonopeltis Šnajdr 1958 discussed p. 65 (247), *K. evodolai* Š. [holotype figured] with immature stages p. 66 pl. ii figs. 3-6, pl. iii figs. 1-16, 18-26, pl. iv figs. 1-2, text-figs. 21-22, *K. partschii* p. Barrande 1846) restr. lectotype chosen and figured with synonym *Bronteus subtriangularis* and *B. carinatus* Hawle & Corda [both lectotypes chosen and figd.] & including *B. simulans* of B. 1852 *partim* (pl. 48 figs. 31-32) p. 70 pl. iv figs. 3-12 text-fig. 23, *K. partschii inopinata* subsp. n. including *B.* p. of B. 1852 (pl. 46 fig. 31) p. 73 (247) pl. iv figs. 13-16, *K. parvispina* sp. n. p. 73 (248) pl. ix figs. 13-14 text-fig. 24, *K. hornyi* sp. n. including *B.* p. of B. 1852 (pl. 46 figs. 23-24, 125) p. 75 (248) pl. v figs. 2-7 text-fig. 25, *K. nuntia* (B. 1852) holotype figd. p. 76 pl. v fig. 9, *K. plasi* sp. n. p. 77 (248) pl. iii fig. 17, pl. v fig. 8 Silurian (Upper) Bohemia, *K. tchernychevae* sp. n. for *B.* cf. p. of Weber 1945 figd. p. 78 (249) pl. xxxvi fig. 7 Silurian U.S.S.R. (Urals), *Šnajdr Rozpr. Úst. úst. geol.* 26 1960.

Krolina gen. n. [Protolenidae] p. 175 for type *K. pressulata* sp. n. p. 176 pl. i figs. 4-6 Cambrian (Lower) U.S.S.R. (E. Sayan), *Repina* Regional Strat. S.S.S.R. 4 1960.

Kushanopyge serrata Chu 1959 discussed and may be referable to *Monkaspiis* p. 269 text-fig. 12c, *Kobayashi* (3).

Kyphocephalus sp. p. 813 pl. xvi figs. 35-36, *Lochman & Hu*.

Labiostris Palmer 1954 restricted to type and referred to *Aphelaspidae* subfam. n. p. 80; *L. platifrons* P. tentatively referred to *Taenora* gen. n. p. 84, *L. sigmoidalis* P. removed from *L.* and related to *Simocheilus* gen. n. p. 80, *Pterocephalina texana* Resser 1942 probably referable to *L.* p. 90, *Palmer* (1).

Laticephalus Pokrovskaya referred to *Edelsteinaspidae*, *L.* sp. p. 209 pl. vii fig. 10, *Repina*.

Latilorenzella gen. n. [Agraullinae] p. 390 for type *Agraulis divi* Walcott text-fig. 9g, also including *A. regularis* W. Cambrian (Middle) China, *Kobayashi J. Fac. Sci. Tokyo Univ.* [2] 12 2 1960.

Lecanopygidae see *Minicephalus* gen. n.

Leimitzia Szdzy discussed and referred to *Dikolophalininae* p. 251, *Kobayashi* (3).

Leioestegiinae discussed p. 359, *Kobayashi* (4).

Leioestegiinae see *Iranochuangia* gen. n.

Lenaspis Suvorova discussed and referred to *Jakutinae* p. 88, *L. opipara* S. holotype figured p. 89 pl. xi figs. 20-22 text-fig. 28, *L. limata* S. holotype figured p. 91 pl. xii fig. 1 text-fig. 29, *Suvorova*.

Leonasaspis (*Grossia*) subgen. n. p. 115 for type *Acidaspis myops* Reinhold. Richter 1863 p. 116 pl. xii figs. 7-8 Devonian (Middle) Germany (Thuringia), *Alberti Mitt. geol. Staatsinst. Hamb.* 29 1960.

Leonasaspis coronata (Salter), *L.* sp. p. 177, *Squirrell & Tucker*.

Leonasaspis (*Acantholomina*) *minuta* (Barrande) p. 269, *Churkin & Langenheim*.

Leonasaspis (*Kettneraspis*) *moravica* (Strnad 1956) p. 344 pl. ii figs. 6-9, *Strnad* (1).

Leonasaspis olini Troedsson 1918 refigured including *Entomostracites granulatus* Wahlenberg 1818 *partim* (pl. 2 fig. 4*) refigured and with synonym *Acantholoma mirka* Marek 1952 p. 98 pl. vii figs. 5-6, pl. xiv figs. 1-4, pl. xv fig. 4, pl. xviii fig. 6 text-fig. 25, *L. centrina* (Dalman 1828) lectotype selected and figured p. 101 pl. xv fig. 5 text-fig. 26, *Kielan* (1).

Leonasaspis sp. p. 116, *Lawson*.

Lermontoviella Pokrovskaya referred to *Ptychopariidae*, *L. porrecta* sp. n. p. 201 pl. xiii figs. 9-10 Cambrian (Lower) U.S.S.R. (E. Sayan), *Repina* Regional Strat. S.S.S.R. 4 1960.

Liaoningaspis taitzeoensis Chu 1959 discussed and probably referable to *Monkasaspis* p. 268 text-figs. 12a-b, **Kobayashi** (3).

Liaotungia Resser & Endo 1937 discussed and referred to Menocephalitinæ subfam. n. p. 381, **Kobayashi** (4).

Lichapyge ? problematica Reed type of *Girvanopyge* gen. n. p. 254, **Kobayashi** (3).

Lichas cf. *anglicus* Boyer, *L. hirsutus* Fletcher, *L.* sp. p. 177, **Squirrell & Tucker**.

Lichas araneus Lindström 1885—request to ICZN for ruling whether *L. aranea* Holzapfel 1895 is a homonym p. 233, **Tripp**.

Lichengia Kobayashi discussed and referred to Ordosinæ p. 372, **Kobayashi** (4).

Lichida taken to include Lichina and Odontopleurina p. 233, **Kobayashi** (3).

Liobole see *Phillibole*.

Liocnemis gen. n. [Pterygomotopinæ] p. 120 for type *Phacops recurvus* Linnarsson 1869 with synonym *Ogygia* ? *apiculata* L. 1866 p. 121 pl. ix figs. 11-12, pl. xxi figs. 8-11, pl. xxii figs. 1-2, text-fig. 32 Sweden and Poland, *L. concinnus* sp. n. for *Pterygomotopus* r. of Kielan 1956 partim (pl. 2 figs. 2-3) p. 123 pl. ix fig. 10, pl. xxii figs. 3-7, text-fig. 33 Poland (Lysa Gora) Ordovician (Upper), **Kielan** *Paleont. polon.* No. 11 1960.

Lioparia Lorenz discussed with synonym *Yokusenina* Kobayashi and referred to Liopariinæ subfam. n. p. 393, *L. latelimbata* (Dames) discussed, *L. conicula* sp. n. p. 394 pl. xxi fig. 15 Cambrian (Upper) S. Korea; *L. expansus* Kobayashi referred to *Eymekops* p. 395, **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Liopariinæ subfam. n. [replacement name for Yokuseninæ] [Asaphiscidae] p. 391 for *Lioparia*, *Inouyella*, *Kokuria*, ? *Mapania*, ? *Changshanocephalus*, ? *Orloviella* spp. [q.v.], ? *Metiaspina*, **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Lisania Walcott 1911 discussed with synonym *Aojia* Resser & Endo, discussion and list of referred spp. p. 368, *L. convergens* sp. n. for *L. alata* of W. 1913 partim (pl. 15 fig. 19a) p. 369 Cambrian (Middle) China, **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Litaepis gen. n. [Solenopleurellinæ] for type *L. pulens* sp. n. p. 137 pl. xii figs. 17, 19, text-fig. 45 Cambrian (Lower) U.S.S.R. (Siberian Platform), **Suvorova** Trud. paleont. Inst. S.S.S.R. 84 1960.

Litocephalus Resser 1937 discussed and referred to Aphelaspidinæ subfam. n. p. 81, *L. bilobatus* (Hall & Whitfield) p. 82 pl. vii figs. 24-27 text-fig. 16 (reconstr.), *L. granulomarginatus* sp. n. p. 82 pl. viii figs. 14, 17-18, 24, *L. verruculapeza* sp. n. p. 83 pl. viii figs. 12-13, 15-16, 19-20 Cambrian (Upper) U.S.A. (Nevada), **Palmer** Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Lloydinæ see *Prolloydia* gen. n.

Lonchocephalidae see *Talbotinella* gen. n.

Lonchocephalus sp. undet. p. 818 pl. xvii fig. 32, **Lochman & Hu**.

Lonchodomas mcgheeii Decker 1931 holotype refigured p. 215 pl. i figs. 1-4, pl. ii fig. 1, **Sutherland & Amsden**.

Lonchodomas pennatus (La Touche) [holotype figured] showing muscle scars p. 82 pl. xi figs. 2, 5, 8-12, **Dean** (1).

Lonchodomas portlocki (Barrande 1846) with synonyms *Ampyz tetragonus* Angelin, *Raphiophorus depressus* A. and A. t. var. *gigas* Linnarsson p. 169 pl. xxxiii fig. 8, pl. xxxv fig. 4, **Kielan** (1).

Lonchodomas rostratus (Sars et Boeck) var. *taimyrica* var. n. p. 31 [pl. vi figs. 6-7] Ordovician (Middle) U.S.S.R. (Arctic), **Balashova** *Sborn. stat. paleont. biostrat.* 17 [pls. in 14] 1960.

Lonchodomas sp. p. 30, **Bogdanov & Chugaeva**.

Lonchodomas sp. p. 39 pl. v fig. 2, **Kobayashi** (1).

Longiproetus see *Proetus*.

Lorenzella Kobayashi discussed, *L. ? taitzeuensis* Endo excluded p. 388, *L. lilja* E. discussed p. 389; *L. quadrata* K. type of *Cyclolorenzella* gen. n. [q.v.] p. 389, **Kobayashi** (4).

Lotagnostus grandis Lermontova msc. [nom. nud.] pl. ii figs. 16-17, **Chernysheva et al.**

Lusatiops cf. *morini* n. sp. [nom. nud.] p. 81, **Hupé** (3).

Macrobole see *Cyrtosymbole*.

Maja Lomovitskaya 1955 replaced by *Erdelia* gen. n. p. 145, **Chernysheva et al.**

Maladidae [recte Maladiinæ] Hupé a synonym of Monkaspidæ p. 236, **Kobayashi** (3).

Maladiodella aff. *splendens* Endo p. 107, **Öpik in Öpik & Pritchard**.

Maladioidella may belong to Aphelaspidinæ subfam. n. p. 80, **Palmer** (1).

Maladioides discussed and excluded from Elviniidae p. 64, **Palmer** (1).

Malykania Suvorova referred to Jakutidae (Malykaninae) subfam. n. p. 108, *M. gribovae* S. holotype figured p. 108 pl. ix figs. 9-15, pl. x figs. 1-9, text-fig. 36, *M. grandis* S. holotype figured p. 111 pl. x figs. 10-12 text-fig. 37, *M. nochtujensis* sp. n. with young stages p. 114 pl. x figs. 13-18, pl. xi figs. 1-19, text-figs. 38-39 Cambrian (Lower) U.S.S.R. (Siberian Platform), **Suvorova** Trud. paleont. Inst. S.S.S.R. 84 1960.

Malykaninae subfam. n. [Jakutidae] p. 107 for *Malykania* and provisionally *Mundocephalina*, **Suvorova** Trud. paleont. Inst. S.S.S.R. 84 1960.

Manaspis gen. n. [Jakutidae] for type *M. oblittera* sp. n. p. 207 pl. i figs. 7-9 Cambrian (Lower) U.S.S.R. (E. Sayan), *Repina* Regional Strat. S.S.S.R. 4 1960.

Manusyella Endo 1937 a synonym of *Shirakiella* p. 390, *Kobayashi* (4).

Manusya Sun 1924 discussed p. 363, *M. hopeiensis* sp. n. for *M. orientalis* Sun 1934 *partim* (pl. 3 figs. 7i-j) China p. 364 text-fig. 5a, *M. trigonalis* sp. n. S. Korea Cambrian (Upper) p. 364 pl. xx fig. 20 [sic], pl. xxi fig. 18, text-fig. 5c, *Kobayashi* J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Mapania Resser & Endo discussed and referred tentatively to *Liopariinae* subfam. n. p. 392, *Kobayashi* (4).

Mareda mukazegata Kobayashi p. 407 pl. xix figs. 31-32 text-fig. 14b, *Kobayashi* (4).

Maryvillia sp. undet. p. 818 pl. xvii figs. 27-28, *Lochman & Hu*.

Mcnairia inornata Deiss p. 827 pl. o figs. 39-40, *Lochman & Hu*.

Megadunderbergia Kobayashi considered indeterminate [see also *Dunderbergia*] p. 66, *Palmer* (1).

Megalaspidis see *Megistaspidis*, *M. centron* (Leuchtenberg) discussed p. 185, *M. latilimbata* Angelin a nom. dub. p. 197, *Bohlin*.

Megalaspidis gladiator, *M. cf. g.*, *M. sp.* table 1 p. 6, *Volk*.

Megamansuyia glabra (Endo) listed p. 333, *Kobayashi* (4).

Megistaspidella see *Megistaspidis*.

Megistaspidis Jaanusson 1956 discussed p. 166 and spp. grouped into: A (1) *M. laurouvi* (Schmidt 1906) lectotype chosen p. 168 pl. iii figs. 2-4 text-figs. 10, ? 11; (2) *M. heros* (Dalman 1828) lectotype chosen and figured p. 170 pl. ii fig. 4, pl. iv figs. 2-3, pl. v fig. 1, pl. vi figs. 1-2, text-figs. 12-13, 16a, c, *M. heroica* sp. n. for *M. heros* of Schmidt 1898 and 1906 p. 174 pl. ii fig. 2, pl. v fig. 2, pl. vii figs. 1-8, text-figs. 15, 16a, d, e; B *M. (Megistaspidella)* including (3) *Megalaspidis rudis* Angelin 1854 nom. dub., *M. (M.) grandis* (Sars 1835) lectotype chosen and figured p. 179 pl. iii fig. 1, *M. (M.) acuticauda* (A. 1854) lectotype chosen and figured [excluding Schmidt 1906] p. 181 pl. viii figs. 1-7 text-figs. 17-20, *M. (M.) spinulata* sp. n. for *Megalaspidis a. var. typica* of S. 1906 p. 186; (4) *M. (M.) conveza* sp. n. for *M. grandis* var. *lata* and var. *rudis* of Törnquist 1884 p. 186 pl. ix figs. 1-5 text-figs. 21-22, *M. (M.) sp. (f. aff. c.)* pl. ii fig. 1, *M. (M.) curvispina* sp. n. for *M. sp.* of Bohlin 1949 and 1955 p. 189 pl. ii fig. 3, pl. x figs. 1-5, text-figs. 23-24, *M. bombifrons* sp. n. p. 192 pl. i fig. 1, pl. xi figs. 1-7 text-figs. 7, 25-26, *M. (M.) cf. b.* pl. i figs. 2-3, pl. iv fig. 1, *M. (M.) obtusicauda* (B. 1955) p. 197 text-figs. 6, ? 27a, *M. (M.) gigas* (A. 1851) p. 198 pl. xii figs. 1-5 text-figs. 27b, c, 28 Ordovician (Lower) Scandinavia and Baltic [see also *Megalaspidis*], *Bohlin* Bull. geol. Instn Univ. Uppsala 38 2 1960.

Meneviella sp. p. 222 pl. xvii fig. 11, *Repina*.

Menocephalites Kobayashi discussed and referred to *Menocephalitinæ* subfam. n. p. 381, *Kobayashi* (4).

Menocephalitinæ subfam. n. [Solenopleuridae] p. 380 for *Menocephalites*, *Paramenocephalites* gen. n., *Liaotungia*, *Eilura*, *Kobayashi* J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Menocephalus admata Walcott type of *Paramenocephalites* gen. n. p. 381, *Kobayashi* (4).

Monomoniidae see *Josina* gen. n.

Monoparia referred to *Prospatokephalidae* fam. n. p. 33, *Rozova* (2).

Mesoparia ord. n. for *Calymenidae* and *Homalotidae* p. 38, *Lisbôa* Rev. Escola de Minas, Ouro Preto 16 4 1951.

Metacalymene baylei (Barr. 1846)—*Calymene tenera* B. is apparently identical p. 114, *Vaněk*.

Metagraulos [Kobayashi]—*Yabeia* Resser & Endo probably a synonym p. 387, *Kobayashi* (4).

? *Metaphillipsia seminiferus* (Phillips) p. 311, *Wilson*.

cf. *Metaphillipsia seminifera* (Phillips) p. 129, *Johnson*.

Metapilekia martellii (Kobayashi) for *Metopolichas* ? m. K. 1934 p. 260, *M. sp. nov.* p. 261 pl. xiii fig. 26, *Kobayashi* (3).

Metascutellum gen. n. [Scutellulidae] p. 184 (259) for type *M. pustulatum* (Barrande 1846) for *Bronteus pustulatus* B. lectotype chosen and figd. [excluding records of B. 1852 *partim* pl. 48 figs. 13-16 and 1872 to "Scutellum" multiverrucatum sp. n.] with synonym *S. gaudryi* Prantl & Přibyl 1947 holotype figd. p. 185 pl. xix figs. 6-14 text-fig. 57 Devonian (Lower) Bohemia, *Šnajdr* Rozpr. Úst. úst. geol. 26 1960.

Metashantungia see *Shantungia*.

Metisaspina Sivov may belong to *Liopariinae* subfam. n. p. 393, *Kobayashi* (4).

Metopolichas ? *martellii* Kobayashi referred to *Metapilekia* p. 260, *Kobayashi* (3).

Micmacca Matthew discussed p. 64, *M. (Micmacca)* discussed p. 65, *M. (M.) tumida* sp. n. p. 66 pl. vii figs. 4-8 text-fig. 21 Cambrian (Lower) U.S.S.R. (Siberian Platform), *Suvorova* Trud. paleont. Inst. S.S.S.R. 84 1960.

Micmacca meridionalis n. sp. [nom. nud.] p. 81, *Hupé* (3).

Micragnostus see *Geragnostus*.

Micragnostus coreanicus sp. n. p. 234 pl. xiii figs. 7-11 Ordovician (Lower) Korea (South), *Kobayashi* J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Microparia speciosa Hawle & Corda 1847 with synonyms *Aegolina* ? *oblongula* Angelin type refigured and *Symphysurus superstes* Olin 1906 restr. [non pl. 3 fig. 6] of which lectotype selected and figured p. 88 pl. x figs. 4-9, **Kielan** (1).

Microphillipsia gen. n. [Phillipsiidae] p. 5 for type *M. tetraptera* sp. n. p. 6 pl. i figs. 1, 4-9, ? 2-3, text-figs. 1-3, ? 4 Permian (Middle) Sicily, **Ruggieri** Mem. Inst. geol. Univ. Padova 21 1959.

Microscutellum gen. n. [Scutelluroidae] p. 92 (252) for type *Bronteus hawlei* Barrande 1852 with synonym *B. asperulus* Hawle & Corda [both lectotypes chosen and figd.] p. 93 pl. xxxiv figs. 8-13 text-fig. 31, *M. zippeli* (B. 1846) for *B. z. B.* lectotype chosen and figd. [excluding B. 1852 pl. 45 figs. 22-23 to *Paralejurus dormitieri*] p. 95 pl. xxviii figs. 8-10, pl. xxix fig. 3 [figs. include another "lectotype" of *B. asperulus*], ? *M. tenellum* (B. 1852) for *B. t. B.* restr. (non pl. 47 figs. 36-38 to *Paralejurus campanifer*) lectotype chosen and figd. p. 97 pl. xxxv figs. 15-16 Devonian (Lower) Bohemia, **Snajdr** Rozpr. Úst. úst. geol. 26 1960.

Mimana curyrachis Kobayashi listed p. 333, **Kobayashi** (4).

Minicephalus gen. n. [Lecanopygidae] p. 816 for type *M. primus* sp. n. p. 817 pl. xviii figs. 42-52 Cambrian (Upper) U.S.A. (Wyoming), **Lochman & Hu** J. Paleont. 34 5 1960.

Minupeltis gen. n. [Ptychoparioidea] for type *M. conservator* sp. n. with pathological paratype cranidium p. 98 pl. x figs. 11-12 Cambrian (Upper) U.S.A. (Nevada), **Palmer** Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Miomera accepted for Agnostina and Eodiscina p. 233, **Kobayashi** (3).

Miraspis mira (Barrande) text-fig. 615, **Müller**.

Modocia—relations to *Ithyektyphus* discussed, *M. nevadensis* Palmer referred to *I.* p. 829, **Lochman & Hu**.

Monkaspidae Kobayashi discussed with synonym Maladiidae Hupé and including Eurekiinae H. as a branch p. 236, **Kobayashi** (3).

Monkaspidae see *Yosimuraspis* gen. n.

Monkaspis Kobayashi discussed p. 237; *Liaoningaspis* and *Kushanopyge* [quae vide] may be synonyms p. 268-9, **Kobayashi** (3).

Monorakeidae Kramarenko 1952 discussed and classified into Monorakeinae and Elasmaspisinae & Carinopyginae subfam. n. p. 6, **Balashova** (1).

Monorakeinae discussed and taken to include *Monorakos*, *Evenkaspis*, *Paravenkaspis*, *Ceratevenkaspis*, *Trypaulites* p. 7, **Balashova** (1).

Monorakeinae see *Elasmaspis* gen. n.

Monorakos magnus Kramarenko p. 8 [pl. iv fig. 5], *M. mutabilis* K. p. 9 [pl. iv fig. 6], *M. ? nordicus* sp. n. [no ? on pl. expl.] p. 10 [pl. iv figs. 3-4], *M. zlobini* sp. n. p. 11 [pl. iv figs. 1-26] Ordovician (Middle) U.S.S.R. (Arctic), **Balashova** Sborn. stat. paleont. biostrat. 17 [pls. in 14] 1960.

Moretaeva n. gen. [nom. nud.] [Strenuasevinae] p. 77, **Hupé** (3).

Morosa gen. n. [Ptychoparioidea (? Housiidae)] p. 98 for type *M. longispina* p. 99 pl. x figs. 15-17 text-fig. 22 (reconstr.) Cambrian (Upper) U.S.A. (Nevada), **Palmer** Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Mundocephalina Repina referred provisionally to Malykaninae subfam. n. p. 107, **Suvorova**.

Myopsolenus see *Protolenid*.

Mystrocephala gen. n. [Brachymetopidae] p. 413 for type *Cordania pulchra* Cooper & Cloud 1938 holotype figured p. 414 pl. liii figs. 15-16, 19, 22-26, pl. liv figs. 1-5 text-fig. 1a, *M. rara* (Stumm 1953) [for *C. r. S.*] holotype figured p. 415 pl. lii figs. 10, 12, 15, *M. varicella* (Hall & Clarke 1888) lectotype selected and figured p. 415 pl. liv figs. 6-10, 12 Devonian (Lower and Middle), **Whittington** J. Paleont. 34 3 1960.

Namanoia Lermontova discussed, *N. namanensis* L. lectotype selected p. 153 pl. xiv figs. 1-9 text-fig. 50, *N. evetasia* sp. n. p. 156 pl. xiv figs. 10-15 text-figs. 51-52, *N. chorincensis* sp. n. p. 160 pl. xiv fig. 16 text-fig. 53 Cambrian (Lower) U.S.S.R. (Siberian Platform), *N. tumida* L. nom. nud. p. 153, **Suvorova** Trud. paleont. Inst. S.S.S.R. 84 1960.

Namanoidea discussed p. 152, **Suvorova**.

Namuropyge R. & E. Richter excluded from Brachymetopidae p. 408, **Whittington** (1).

Neosaphus see *Asaphus*.

Neogriffithides ? *siculus* Gemm. for *Phillipsia* s. G. p. 3, **Ruggieri**.

Neopagetina gen. n. [Pagetiidae] (nom. n. for *Pagetina* Lermontova 1940) p. 56 for type *P. rjonsnitzkii* L. 1940 pl. ii figs. 20-21 Cambrian (Lower and Middle) U.S.S.R., **Pokrovskaya** Principles of Palaeontology. Arthropoda—Trilobitomorpha and Crustaceans 1960.

Neoprobolium oklahomae (Richardson) for *Dalmanites* o. R. p. 53 figs. 1-2 age considered Devonian (Lower), **Frederickson**.

Neoproetus verrucosus Gemm. for *Griffithides* v. G. p. 4, **Ruggieri**.

Neoredlichidae discussed with table of genera p. 21, **Suvorova**.

Neoredlichidae see *Tungusella* gen. n.

Nericia discussed and may belong to Pterocephaliidae p. 80, *N. septemdentata* possibly to Pterocephaliinae p. 84, **Palmer** (1).

Nesocretus Hicks 1872 discussed with synonym *Synhomalonus* Pompeckj and provisionally retained in Calymenidae p. 138, *N. grandior* sp. n. for *Calymene* sp. Whittard 1931 p. 141 pl. xx figs. 1-2, *N. parvifrons* (Salter) holotype figured with synonym *N. ? elongatus* H. p. 142 pl. xix figs. 1-6, *N. brevisulcus* sp. n. p. 146 pl. xix figs. 7-14, pl. xx fig. 3, *N. complanatus* sp. n. possibly including *O. pompeckji* Kobayashi 1937 partim (pl. 6 fig. 24) p. 147 pl. xx figs. 4-5, *N. murichsoni* (S.) lectotype figured [with synonyms *N. ramseyensis* Hicks (lectotype selected and figured p. 139), *N. recurvatus*, *N. ? e. obesus* and probably *N. quadratus* H. partim (pl. 3 figs. 11, 13), ? *C. p. K.* 1937 partim (pl. 6 fig. 23), ? *S. kobayashii* Harrington & Leanza 1957] p. 148 pl. xx figs. 6-15, pl. xxi figs. 1-2 Ordovician (Lower), *N. bullatus* sp. n. p. 150 pl. xviii figs. 9-11 Ordovician (Middle) Britain (Shropshire), Whittard Palaeontogr. Soc. [Monogr.] 113 (for 1959) 1960.

Nevadella sp. p. 88 pl. iv fig. 3 Cambrian (Lower) Spitsbergen; *N. eucharis* (Walcott) and *N. perfecta* (W.) considered conspecific by R. V. Best p. 89, Kielan (2).

Nileus armadillo (Dalman) [small trilobite resembling] p. 275, Stanton.

Nileus sp. table 1 p. 6, Volk.

Niobe cf. *emarginula* Angelin p. 217, Tjernvik.

Niobe lata Angelin referred to *Opsimasaphus* gen. n. [q.v.] p. 78, Kielan (1).

Niobella bohlini Tjernvik p. 217, Tjernvik.

Nodiceps Suvorova discussed p. 123, *N. onerosa* S. holotype figured p. 124 pl. xii figs. 2-6 text-figs. 40-41, Suvorova.

Novaspis albida (Reed 1914) p. 175 pl. xxxiv fig. 3, pl. xxxvi figs. 1-5, text-fig. 50, *N. sp.* p. 178 pl. xxxv fig. 3, Kielan (1).

Octobronteus Weber 1945 discussed p. 56 (246), *O. khodalevitchi* W. 1945 lectotype chosen and figured p. 56 pl. xxxvi figs. 3-4 text-figs. 17A-B, Snajdr.

Odontopleura ovata text-fig. 4a, Whittington (3).

Odontopleura ? sp. Strnad 1956 p. 344, Strnad (1).

Odontopleurina referred to *Lichida* p. 233, Kobayashi (3).

Oedicybele kingi Whittington 1938 p. 157 pl. xxv fig. 4, Kielan (1).

Oedorhachis Resser 1938 discussed p. 12, *O. australis* sp. n. p. 13 pl. i fig. 8 Cambrian (Middle) Argentina (Mendoza); *O. boltonensis*, *tennesseensis*, *meileri* and *greendalensis* R. sp. may belong to *Pseudognostus*, Poulsen Mat.-fys. Medd. danske Vid. Selsk. 32 11 1960.

Ogmasaphus Jaanusson 1953 discussed and may be only a subgenus of *Asaphus* p. 235, *O. jaanussoni* sp. n. p. 237 pl. ix figs. 1-3, *O. kiaeri* sp. n. p. 239 pl. x figs. 1-12, *O. multistriatus* sp. n. p. 241 pl. vi figs. 13-17, *O. stoermeri* sp. n. p. 242 pl. xi figs. 1-6, *O. sp.* p. 244 pl. xii fig. 9 Ordovician (Middle) Norway (Oslo), Henningsmoen Norsk geol. Tidsskr. 40 3-4 1960.

Ogmocnemis gen. n. [Proetinae] p. 69 for type *O. irregularis* sp. n. Ordovician (Upper) Poland (Lysa Gora) p. 70 pl. iii figs. 3-9, pl. iv figs. 8-9, pl. xxvi fig. 1 text-fig. 17; *Trilobites asellus* Esmark, *Forbesia brevifrons* Angelin, *Proetus modestus* Törnquist, *P. remotus* Warburg, *P. subornatus* Cooper & Kindel referred to *O. p. 69*, Kielan Palaeont. polon. No. 11 1960.

Ogygia ? *apiculata* Linnarsson 1866 a synonym of *Licnecnemis recurvus* (L.) p. 121, Kielan (1).

Ogygiacaris Angelin 1854 discussed and restricted to Scandinavian forms p. 213, stratigraphical range p. 214, glabellar segmentation p. 212 text-fig. 2, *O. dilatata* (Brünnich 1781) lectotype selected and figured with synonyms var. *stromi* Angelin 1878 [lectotype selected and figured] and *Asaphus debuchianus* Brongniart 1817 p. 217 pl. i figs. 1-7, pl. ii figs. 1-6 text-fig. 4 (reconstr.), *O. striolata* sp. n. p. 221, *O. s. striolata* subsp. n. p. 222 pl. iii figs. 4-10, *O. s. corrugata* subsp. n. p. 223 pl. iii figs. 1-3, 11, *O. sarsi* A. 1878 discussed with notes on ontogeny p. 223, *O. s. sarsi* A. 1878 neotype [called lectotype on pl. expl.] selected and figured p. 225 pl. iv figs. 1-10 text-fig. 5 (reconstr.), *O. s. regina* subsp. n. [including *O. d. sarsi* partim of Hadding 1913 (text-fig. 23) & of Störmer 1953 (pl. 2) and *O. lata* partim of Thorslund 1935 (pl. 1 fig. 1)] p. 227 pl. v figs. 1-8, pl. vi fig. 5, *O. s. delicata* subsp. n. p. 228 pl. vi figs. 1-4, 6-12 Ordovician (Middle) Norway (Oslo), *O. s. lata* H. 1913 lectotype selected for *O. d. l. H.* [including *O. d. sarsi* of H. 1913 (non text-fig. 23) and *O. d. stromi* of H. 1913] p. 229 pl. v fig. 9; *O. aravirhachis* Harrington & Leanza, *O. ? plana* and *O. ? inflexicostata* Thoral excluded from *O. p. 214*, Henningsmoen Norsk geol. Tidsskr. 40 3-4 1960.

Ogygopsis recorded from L. Cambrian of California and Nevada p. 2071, Nelson.

Ogygopsis klotzi (Rom.) in apparent Salter'sche Einbettung p. 104 text-figs. 1-2, Lehmann.

Olenaspella vertical range discussed, *O.* [2 new spp.] p. 44, Lochman-Balk.

Olenellidae discussed p. 17, Suvorova.

Olenellus svalbardensis sp. n. p. 84 pl. i figs. 1-3, pl. ii figs. 1-5, pl. iii figs. 1-5b, pl. iv figs. 1-2 Cambrian (Lower) Spitsbergen, *O. truemanii* Walcott discussed p. 88, Kielan Studia geol. polon. 4 1960.

Olenellus sp. text-fig. 4i, Whittington (3).

Olenina Poletaeva [not seen]—*Arimichevia* P. a synonym p. 26n, Ivahin.

Olenoidae see Proasatokephalidae fam. n.

Olenoides convexus Lermontova p. 197 pl. ix figs. 1-3, pl. xviii fig. 4, *O. entis* sp. n. p. 198 pl. xviii figs. 5-7, *O. sp.* p. 198 pl. xvi fig. 12 Cambrian (Middle) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

cf. *Olenoides incertus* Shaw p. 827 pl. c fig. 41, *O. sp. undet.* p. 799, Lochman & Hu.

Olenus ? wilsoni Henningsmoen p. 79 pl. vi figs. 18, 20-22 text-fig. 15 (reconstr.), *O. ? granulatus* sp. n. p. 79 pl. vi figs. 23-27 Cambrian (Upper) U.S.A. (Nevada), Palmer Prof. Pap. U.S. geol. Surv. No. 334—C 1960.

Oligometopus Resser discussed, *O. breviceps* (Walcott) holotype figured p. 100 pl. x figs. 19-20, Palmer (1).

Onnia Bancroft 1933 discussed with table of distinctions from *Broeggerolithus* p. 127, *O. ? cobboldi* (B.) lectotype selected p. 128 pl. xix figs. 1, 3, 12, *O. gracilis* (B.) lectotype selected and figured p. 130 pl. xix figs. 2, 7, *O. superba* (B.) cephalic ontogeny p. 133 pl. xix figs. 4-6, 8-9, 11, 13-14, *O. aff. s.* (B.) p. 136 pl. xix fig. 10; *Cryptolithus* cf. *porlocki* of Sterner 1930 probably an *O.* related to *O. s.*, *O. verrucosa* Rusconi 1956 should probably be excluded from *O.* p. 138, *O. c.* of G. & H. Termier 1950 identification suspect p. 137, Dean (1).

Onnia ornata (Sternberg) text-figs. 514 pars, 579a, Müller.

Opsimasaphus gen. n. [Asaphinae] p. 75 for type *O. jaanussoni* sp. n. Ordovician (Upper) Bornholm including *Asaphus nobilis* of Barrande 1852 partim (pl. 31 figs. 2-3, 6-8) p. 79 pl. vii figs. 1-2 text-fig. 21, *O. latus* (Angelin 1851) for *Niobe lata* A. lectotype chosen and figured p. 78 pl. vi figs. 1-2, pl. vii fig. 3, pl. viii fig. 4 text-fig. 20, *O. sp.* for *A. ingens* of Olin 1906 p. 81 pl. viii fig. 3, Kielan Palaeont. polon. No. 11 1960.

Ordosia Lu discussed p. 371, Kobayashi (4).

Ordosinae discussed and referred to Pagodiidae p. 371; *Taitzia*, *Poshania*, *Lichengia* and *Peichia* referred, Kobayashi (4).

Orloviella elandensis (Egorova) and *O. conica* Sivov may belong to Lioparinae subfam. n. p. 392, Kobayashi (4).

Ormathops Delo 1935 discussed, *O. nicholsoni* (Salter) for *Phacops* n. S. lectotype selected and figured with synonym *O. barroisi* (Klouček) p. 128 pl. xvi figs. 6-7, *O. llanvirnensis* (Hicks) for *Phacops* l. H. syntypes figured may be a synonym of *O. n.* p. 130 pl. xvi figs. 8-9, pl. xviii fig. 1, *O. alatus* sp. n. Ordovician (Middle) Britain (Shropshire) p. 131 pl. xvi fig. 10, Whittard Palaeontogr. Soc. [Monogr.] 113 (for 1959) 1960.

Otarion (*O.*) *cuvianianum* sp. n. for *Cyphaspides* sp. Strnad 1956 [recte 1957] p. 340 (349) pl. iv figs. 14-17, pl. ii fig. 10 pars, 3 text-figs. [p. 341] Devonian (Middle) Czechoslovakia (Silesia), Strnad Přír. Čas. Slezský 21 3 1960.

Otarion cf. *megalops* (McCoy), *O. sp.* p. 177, Squirrel & Tucker.

Otarion aff. *novella* Barrande, *O. sp.* p. 156, Cavet.

"*Otarion*" *tenuis* sp. n. p. 63 pl. ii figs. 1-2 text-fig. 15, "*O.*" sp. a p. 179 pl. viii fig. 6, *O. sp. b* p. 180 pl. ii figs. 8-9, "*O.*" sp. c p. 181 pl. vii fig. 4, pl. viii fig. 5 Ordovician (Upper) Poland (Lysa Gora), Kielan Palaeont. polon. No. 11 1960.

Otarion (*O.*) n. sp. [undescrib.], *O. (Coignouina) davidsoni* Barr. p. 350, Chlupáč & Vaněk.

Otarion sp. [compared with *O. barrandei*] p. 45, Cogney.

Otarion sp. p. 350, Tomezykowa.

Otarion sp. p. 412, Whittington (1).

Ouijania referred to Bigotinopsidae fam. n. p. 77, Hupé (3).

Pagetiellus lenaicus (Toll) from Morocco p. 77, Hupé (3).

Pagetiellus sibiricus sp. n. p. 175 pl. xiii figs. 11-14 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Pagodiidae see *Neopagetina* gen. n.

Pagetina Lermontova 1940 renamed *Neopagetina* gen. n. p. 56, Chernysheva et al.

Pagetina primaeva Lerm. pl. v fig. 14 pars, Suvorova.

Pagodia Walcott 1905 discussed with list of spp. p. 366, *P. coreanica* sp. n. p. 367 pl. xix figs. 27-29 text-fig. 60 Cambrian (Upper) S. Korea, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Pagodiidae taken to include Pagodiinae and Ordosiinae p. 366, Kobayashi (4).

Pagodiinae—*Chuangiopsis* referred p. 370, Kobayashi (4).

Paladin Weller 1936 discussed p. 34, *P. eichwaldi* (Fischer 1825) p. 35 pl. vii fig. 1 pars A, pl. viii fig. 1 pars A, pl. ix figs. 1-4, pl. x figs. 1-2, *P. mucronatus* (McCoy 1844)—*Pseudophyllipsia croatica* Schröter 1948 a synonym p. 47n, Bouček & Přibyl.

Palaeolenella gen. n. [Palaeolenidae] p. 214 for type *P. artifex* sp. n. p. 215 pl. x figs. 1-3, *P. doliara* sp. n. p. 215 pl. x figs. 4-5 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Palaeolenidae see *Palaeolenella* gen. n.

Palaeophyllipsia see *Palaeophyllipsia*.

Palaeophyllipsia [so spelt at descr. and pl. expl., elsewhere *Palaeophyllipsia*] gen. n. [compared with *Phyllipsia*], *P. japonica* sp. n. p. 26 pl. i fig. 1 text-fig. (p. 28), *P. ? kitakamiensis* sp. n. p. 29 pl. i figs. 2a-c Devonian (Upper) Japan (Iwate), Sugiyama & Okano Res. Bull. [Stud.] geol. miner. Inst. Tokyo Bunrika Daigaku No. 1 1944.

Palpebralia referred to Drevermanniinae subfam. n. p. 137, Chernysheva et al.

Panderia megalophthalma Linnarsson 1860 including *Symphysurus superstes* Olin 1906 *partim* (pl. 3 fig. 6) p. 93 pl. xii fig. 8, Kielan (1).

Paraaulacopleura see *Aulacopleura*.

cf. *Parabasiliscus powisi* (Murchison), ? P. d. p. 167, Dean (3).

Parabolinoidea expansus Nelson p. 811 pl. xov figs. 32-35, P. cf. P. e. p. 798, Lochman & Hu.

Paraceratopyge Poletayeva 1945 [not seen] [Ceratopyginae] discussed p. 104, P. *kuznezkiensis* P. text-figs. 193a-6, Chernysheva et al.

Paracolpocoryphe dubia n. gen. n. sp. p. 1537 [nom. nud.—near to *Colpocoryphe grandis* Šnajdr p. 1539], Destombes et al.

Paracelyboides cf. *loveni* (Linnarsson) p. 334, Cave.

Paradozides bohemicus text-fig. 4f, Whittington (3).

Paradozides gracilis (Boeck) text-fig. 532b, Müller.

Paragraulos Lu 1941 discussed with synonym *Inouyops* Resser p. 385, Kobayashi (4).

Parahousia gen. n. [Housiidae] p. 76 for type *P. constricta* sp. n. p. 77 pl. vii figs. 16-18 text-fig. 13 (reconstr.) Cambrian (Upper) U.S.A. (Nevada), Palmer Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Parairvingella see *Irvingella*.

Parairvingella hamburgensis Resser referred to *Elvinia* [quod vide] p. 71, Palmer (1).

Parakingaspidoidea n. gen. [nom. nud.] [Palaeolenidae] p. 77, *P. truncatus* n. sp. [nom. nud.] p. 81, Hupé (3).

Parakoldinia gen. n. [Plethopeltidae] p. 49 for type *P. striata* sp. n. p. 52 pl. vi figs. 1-6, *P. plana* sp. n. p. 54 pl. vii figs. 1-5, *P. hemisphaerica* sp. n. p. 55 pl. vii figs. 6-10, *P. longa* sp. n. p. 57 pl. vi figs. 13-18 Cambrian (Upper) U.S.S.R. (Salaire), *P. salaireica* (Sivov) p. 58 pl. vi figs. 7-12; *P. gibbosa* (Lermontova), *P. globosa* (Sivov), *P. paichinensisformis* (S.) transferred from *Kingstonia* p. 52, Rozova Trud. Inst. eol. geophiz. AN S.S.S.R. (Sib. Otd.) 5 1960.

Paralejurus Hawle & Corda 1847 discussed p. 187 (260), *P. campanifer* (Beyrich 1845) neotype chosen and figd. [including *Bronteus tenellus* of Barrande 1852 *partim* pl. 47 figs. 36-38] p. 189 pl. xxiii figs. 2-14, pl. xxiv figs. 1-2, pl. xxv fig. 8, text-figs. 58-59, *P. brongniarti* b. (B. 1846) with synonym *B. pulcher* Hawle & Corda 1847 both lectotypes chosen and figd. p. 193 pl. xxi figs. 9-14, pl. xxii figs. 1-13, pl. xxiii fig. 1, text-fig. 60, *P. b. mēhanensis* subsp. n. p. 196 (260) pl. xxv figs. 10-11, *P. dormitzi* d. (B. 1852) with synonym *B. aulicus* H. & C. 1847 both lectotypes chosen and figd. and including *B. zippei* of B. 1852 *partim* (pl. 45 figs. 22-23) but excluding *B. d.* of Le Maître 1934 p. 196 pl. xxiv figs. 3-16, pl. xxv figs. 1-3, text-fig. 61, *P. bohemicus* sp. n. p. 200 (261) pl. xxv figs. 4-5, *P. richteri* sp. n. p. 201 (261) pl. xxv figs. 6-9 Devonian (Lower) Bohemia, Šnajdr Rozpr. Úst. úst. geol. 26 1960.

Paramansuyella glabra Endo type of *Taipaikia* gen. n. p. 398, Kobayashi (4).

Paramansuyella aff. *puteata* Endo p. 107, Ōpik in Ōpik & Pritchard.

Paramenocephalites gen. n. [Menoccephalitinae] p. 381 for type *Menoccephalus admata* Walcott 1905 text-fig. 7f Cambrian (Middle) China; *Damesella nitida* Resser & Endo also referred to *P.*, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Paramenomonia Chu 1959 discussed and referred to *Damesellidae* (Paramenomoniinae) subfam. n. p. 354, *P. conica* C. text-fig. 2h, Kobayashi (4).

Paramenomoniinae subfam. n. [Damesellidae] for *Paramenomonia* Chu 1959 p. 354, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Paramiema Lermontova with synonym *Acanthomimemacra* Hupé, *P. siberica* L. lectotype chosen p. 68 pl. vii figs. 1-3 text-fig. 22, *P. petropavlovskii* sp. n. p. 72 pl. vii figs. 9-10 text-fig. 23, *P. insolens* sp. n. p. 73 pl. vii figs. 11-13 text-fig. 24 Cambrian (Lower) U.S.S.R. (Siberian Platform), Suvorova Trud. paleont. Inst. S.S.S.R. 84 1960.

Parapoliella Chernysheva referred to *Jakutinae* p. 86, Suvorova.

Parapoliella obrutchevi (Lermontova) p. 206 pl. vi fig. 7, *P. sulcata* Chernysheva [nondesc.] p. 206 pl. vi figs. 1-6, pl. viii figs. 1-3, Repina.

Parashantungia see *Shantungia*.

Parasolenopleura Poletayeva [non Westergård] discussed p. 377, Kobayashi (4).

Pedinocephalina gen. n. [compared with *Pedinocephalus* and *Coenaspis*] p. 201 for type *P. bella* sp. n. p. 203 pl. i figs. 1-2, *P. composita* sp. n. p. 205 pl. i figs. 3-4 Cambrian (Upper) U.S.S.R. (Salaire), Rozova Trud. Inst. geol. geophiz. AN S.S.S.R. (Sib. Otd.) 1 1960.

Pedinocephalina Rozova discussed and referred to *Alokistocarinae* p. 70, *P. bella* R. holotype figd. p. 72 pl. iii figs. 13-14, *P. composita* R. holotype figd. p. 74 pl. iii figs. 15, 15a, Rozova (2).

Pedinocephalus see *Pedinocephalina* gen. n.

Peichiashania Chang discussed and referred to *Ordosinae* p. 372, Kobayashi (4).

Pernoproetus postcarbonarius Gemm. for *Proetus* p. G. p. 3, Ruggieri.

Peronopsinae see *Stigmagnostus* gen. n.

Peronopsis ultima sp. n. p. 13 pl. i fig. 13 Cambrian (Middle) Argentina (Mendoza) [may include cephalic referred to *Baltagnostus hospitus* sp. n. q.v.], Poulsen Mat.-fys. Medd. danske Vid. Selsk. 32 11 1960.

Pesaia avia Sivov referred to *Pesaina* p. 7, Ivshin.

Pesaina Poletaeva [not seen]—*Pesaia avia* Sivov referred p. 7, Ivshin.

Phacopid—*Homalonotus barratti* may be p. 104, **Stubblefield**.

Phacopid glabella p. 270, **Anderson**.

Phacopid (undescribed) p. 892, **Tillman**.

Phacopidella liopyga Reinh. Richter text-fig. 515b, **Müller**.

Phacopidella (*Denckmannites*) *micromma* (A. Roemer 1852) p. 346, **Strnad** (1).

Phacopidella primitiva sp. n. p. 93 pl. ii figs. 5-11, P. sp. p. 96 pl. v fig. 13 Devonian (Middle) U.S.S.R. (Altai), **Maksimova** Devonian and Carboniferous trilobites of the Rudny Altai 1960.

Phacopidella (*Denckmannites*) *thuringica* Kegel 1931 p. 114 pl. xi figs. 5-9, **Alberti**.

Phacopidina apiculata (M'Coy) p. 168, **Dean** (3).

Phacopidina (*Dreyfussina*) cf. *exoptalma* Dreyfuss p. 1538, **Destombes et al.**

Phacopoid see Trilobite pygidium.

Phacops altaicus Tschernyschew 1893 lectotype chosen and figured p. 75 pl. i figs. 11-16, pl. iii figs. 3, 7, pl. v figs. 1-4, P. cf. a. p. 90 pl. iii fig. 8, P. *sternbergi* Hawle & Corda lectotype chosen p. 79 pl. iii fig. 2, pl. v figs. 5-10, P. *potieri ulbensis* subsp. n. p. 81 pl. ii figs. 12-18 Devonian (Middle), P. *oculeus* sp. n. p. 83 pl. iii fig. 4 Devonian (Middle), P. *postaltaicus* sp. n. p. 84 pl. viii figs. 9-13 Devonian (Upper), P. *loganops* sp. n. p. 86 pl. vii figs. 12-13, text-fig. 4 Devonian (Middle), P. aff. l. p. 91 pl. iv figs. 6-7, P. *cristata* var. *pipa* Hall & Clarke 1888 lectotype chosen p. 89, P. cf. c. var. p. p. 89 pl. iii fig. 12, P. aff. *promini* Maksimova p. 92 pl. viii fig. 8, P. sp. p. 92 pl. iii fig. 13 U.S.S.R. (Altai), **Maksimova** Devonian and Carboniferous trilobites of the Rudny Altai 1960.

Phacops aff. *batrachensis* Whidb., P. aff. *cristata* Hall, P. ex gr. *secundus* Barr., P. sp. p. 121, **Bel'skaya**.

Phacops secundus Barr., P. f. var. *lyanteyi* Lecointre, P. *fugitivus* B. p. 46, **Cogney**.

Phacops (P.) *secundus* *degener* Barrande, P. (P.) *turco* R. & E. Richter, P. (P.) *schlotheimi* Bronn, P. (P.) aff. *angusticeps* Giebel p. 160, **Cavet**.

Phacops secundus *major* Barr. p. 350, **Chlupáč & Vaněk**.

Phacops (P.) *granulatus* (Münster) p. 154 ff., P. (P.) *acipitrinus* a. (Phillips), P. (P.) *wedekindi* R. & E. Richter, P. (P.) *crystops* ? *ensae* R. & E. R. p. 177, P. (C.) *wocklumeriae* R. & E. R., P. (Dianops) sp. p. 178 pl. xxix fig. 4, **Selwood**.

Phacops nicholsoni Salter and P. *ilavirvirens* Hicks referred to *Ormathops* [q.v.] p. 128, 130, **Whittard**.

Phacops okanoi sp. n. Devonian Japan p. 24 [unilustr.], **Sugiyama** Res. Bull. [Stud.] geol. miner. Inst. Tokyo Bunrika Daigaku No. 1 1944.

Phacops okanoi Sugiyama p. 44, **Okubo** (2) [omitted Z. R. 93 11 (for 1956)].

Phacops quadrilineatus Angelin p. 21 [pl. v fig. 19], **Balashova** (1).

Phacops recurvus Linnarsson type of *Liocnemis* gen. n. p. 120, **Kielan** (1).

Phacops (P. ?) *roemeri* Geinitz 1853 p. 111 pl. xi fig. 4, P. (*Ecoryphops*) *cyclophthalmus* (Walther 1907) p. 112 pl. xi figs. 1-3, P. (*Plagiolaria*) *plagiophthalmus* (Reinh. Richter 1865) p. 113, **Alberti**.

Phacops stokesi (Milne Edwards), P. sp. p. 177, **Squirrell & Tucker**.

Phacops truncatocaudatus Portlock type of *Pterygometopus* (*Truncatometopus*) subgen. n. p. 9, **Pillet** (3).

Phacops sp. indet. p. 346 pl. iv figs. 19-22, **Strnad** (1).

Phaetonellus sp. (non *planicaudus* Barr.) p. 350, **Chlupáč & Vaněk**.

Phalacroma ? sp. p. 63 pl. iv fig. 13, **Palmer** (1).

Pharostoma Hawle & Corda 1847 discussed and referred to *Calymenidae* p. 132, P. *pulchrum* (Beyrich) so attributed p. 134 pl. xviii figs. 2-8, discussion of several spp. of P. p. 137, **Whittard**.

Pharostomidae see Ptychometopinidae subfam. n.

Phillibole (*Phillibole*) *apathensis* R. et E. Richter p. 101 pl. figs. 18-20, **Strnad** (2).

Phillibole (P.) *coddonensis* (H. Woodward) [of which P. (P.) *culmica* R. & E. Richter may be a synonym p. 273], P. (P.) aff. c. p. 272, P. (*Liobole*) *glabra* g. (Holzapfel) p. 271 pl. xii fig. 1, P. (L.) sp., P. ? (*Cystisipina*) *spatulata* (H. W.) p. 271 pl. xii fig. 9, P. (P. C.) sp. nov. p. 272 pl. xii fig. 2; *Phillipsia* [*van-der-grachtii* and *polleni*] H. W. 1894 have characteristics of P. s.s. p. 278, **Prentice**.

Phillipsia Portlock 1843 emend. Stubblefield 1952 discussed p. 23, Gruppe der Art P. *gemmulifera* recognised including also i.a. P. *truncatula*, P. *altaica*, P. *margaritifera*, P. *konincki*, P. *scabra*, P. *collinsi* p. 25; P. *margaritifera* Roemer 1870 with possible synonym var. *conferta* Schwarzbach p. 25 pl. ii figs. 1-5, pl. iii figs. 1-2, pl. iv fig. 1, pl. v figs. 1-2, pl. vii fig. 1 pars B, pl. viii fig. 1 pars B, P. *collinsi* Mitchell 1918 lectotype selected p. 28n, **Bouček & Přibyl**.

Phillipsia see *Palaeophyllipsia* gen. n.

Phillipsia see *Phyllipsia*.

Phillipsia altaica Weber 1937 p. 55 pl. ix figs. 9-11, P. *buchtarmensis* sp. n. including P. a. W. 1937 partim (pl. 5 figs. 6, 7) p. 57 pl. ix figs. 6-8, P. ? *abscisa* W. 1937 lectotype chosen p. 60 pl. ix fig. 1, P. aff. *scabra* Woodward 1883 p. 61 pl. ix fig. 12, P. ? *minuta* sp. n. for P. No. 18 of W. 1937 p. 62 pl. ix fig. 3, P. sp. p. 63 pl. ix fig. 4 Carboniferous (Lower) U.S.S.R. (Altai), **Maksimova** Devonian and Carboniferous trilobites of the Rudny Altai 1960.

Phillipsia ohmorensis sp. n. p. 133 pl. i figs. 1a-d, 2-4 Devonian (Upper) or Carboniferous (Lower) Japan (Iwate), Okubo Earth Science [Chikyū Kagaku] No. 4 1951.

Phillipsia sicula Gemmellaro referred tentatively to *Neogriffithides* p. 3, Ruggieri.

Phillipsia [van-der-grachtii and polleni] H. Woodward 1894 have characteristics of *Phillibole* s.s. p. 278, Prentice.

Phillipsia sp. ind. p. 183 text-fig. 2, Milošević.

"*Phillipsia*" sp. p. 4 pl. iii fig. 15, Armstrong.

Phillipsiid p. 309, Phillipsiid pygidium p. 310, Wilson.

Phillipsiidae see *Microphillipsia* gen. n.

Phillipsiinae discussed p. 22, Bouček & Přibyl.

Phillipsinella parabola (Barrande 1846) p. 72 pl. iv figs. 1-7, pl. v figs. 1-3 text-figs. 18-19; record of *P. p.* by Olin 1906 (p. 78) from *Chasmops* Beds belongs to new sp. of *P. p.* 38, Kiellán (1).

Phillipsinellidae discussed and affinities may be with *Proetacea* pp. 47-48, Kiellán (1).

Phoidagnostus solitariensis (Rusconi 1950) for *Gallagnostus* s. R. [re-interpreted as a pygidium] p. 14 pl. i fig. 15, Poulsen (2).

Phyllaspis Reinh. Richter 1863 nov. emend. discussed and referred tentatively to *Tropidocoryphinae* p. 119, *P. raniceps* R. R. 1863 nov. emend. [with synonym *Proetus expansus* R. R. 1865] neotype selected and figured p. 123 pl. xii figs. 1-6, text-figs. 3-5, Alberti.

Phyllipsia (pygidia) p. 49 (51), Stevanović.

Pinctus ? spp. p. 101 pl. x figs. 18, 21, Palmer (1).

Piriproetus see *Proetus*.

Placoparia (*Hawleia*) *prantli* sp. n. p. 125 pl. xxiii figs. 4-6 text-fig. 34 Ordovician (Upper) Poland (Lysa Gora), Kiellán Palaeont. polon. No. 11 1960.

Placoparia cf. *zippei* Boeck p. 1538, Destombes et al.

Plagiolaria see *Phacops*.

Planaspis gen. n. [Aldoniidae] for type *P. gelasinica* sp. n. p. 221 pl. x fig. 9 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Planiscutellum R. & E. Richter 1956 discussed p. 57 (246), *P. planum* (Hawle & Corda 1847) lectotype chosen and figured p. 59 pl. i figs. 1-10, pl. ii figs. 1-2, text-figs. 18-20, Šnajdr.

Plasiopsis Prantl & Přibyl 1948 diagnosis p. 122, considered to form with *Dindymene* and *Cornovica* gen. n. a compact group of *Enerinuridae* p. 121, Whittard.

Plasiopsis excluded from *Dindymeninae* p. 144, *P. bohemia* (Barrande) ventral cephalic sutures (separating a rostral plate) described p. 54 text-fig. 10, Kiellán (1).

Plataspella Wilson discussed and considered separate from *Iddingsia* p. 96; *I. similis* of Bell et al. 1952 partim (pl. 31 fig. 2) referred to *P. p.* 96, Palmer (1).

Platilichas [sic] cf. *lazatus* (McCoy) p. 334, Cave.

Platycalymene Shirley 1936 accepted as a genus p. 151, *P. tasparensis* S. with muscle scars p. 152 pl. xxi figs. 3-12, *P. duplicata* (Murchison) [locality and horizon of holotype discussed] *forma femina* and *forma mas* both found in relief p. 154 pl. xxi figs. 13-15, *P. d. var. parallela* var. n. p. 157 pl. xxi fig. 16, *P. d. cf. p.* p. 157 pl. xxi fig. 17 Ordovician (Middle) Britain (Shropshire), Whittard Palaeontogr. Soc. (Monogr.) 113 (for 1959) 1960.

Platylachas see *Platilichas*

Platysaukia gen. n. [Saukiinae] for type *P. euryrachis* sp. n. p. 407 pl. xix fig. 12, text-fig. 13 b Cambrian (Upper) S. Korea, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Platyscutellum Šnajdr 1958 discussed p. 118 (254), *P. formosum* f. (Barrande 1846) lectotype figd. [excluding records of R. & E. Richter 1943 and H. & G. Termier 1950 and with synonym *Bronteus berkeleyanus* Hawle & Corda lectotype chosen and figd.] p. 119 pl. xvi figs. 1-4, text-fig. 41, *P. aff. f. f.* including *B. planus* of B. 1852 partim (pl. 48 fig. 1) pl. xv figs. 8-9, *P. f. shivenecense* subsp. n. p. 122 (254) pl. xv figs. 5-7, *P. kutorgai* (B. 1852) holotype figd. p. 123 pl. xiv figs. 6-8, pl. xv figs. 1-2, pl. xxxvi fig. 10, *P. lockkovense* sp. n. p. 124 (255) pl. xv figs. 3-4 text-fig. 42, *P. viator* (B. 1852) lectotype chosen and figd. [excluding B. 1852 pl. 47 figs. 21-22 to *Breviscutellum inermis*, Novák 1884 pl. 12 figs. 3-9, H. & G. Termier 1950, cf. Erben 1952] p. 126 pl. xvii figs. 2-8 text-fig. 43, *P. cf. v. pl.* xvii fig. 9, *P. spiniferum* (B. 1852) lectotype chosen and figd. with synonym *B. sosia* B. 1872 holotype figd. p. 129 pl. xvi figs. 5-8, pl. xvii fig. 1, text-fig. 44, *P. magnum* (B. 1872) holotype figd. p. 131 pl. xviii fig. 1 Devonian (Lower) Bohemia, Šnajdr Rozpr. Ust. ust. geol. 26 1960.

Plesiomegalaspis planilimbata (Angelin) pp. 216, 217, Tjernvik.

Plethometopus modestus p. 43, Lochman-Balk.

Plethopeltidae see *Parakoldinia* gen. n.

Plethopeltidae see *Tolstotichaspis* gen. n.

Plomerid gen. et sp. indt. p. 263 pl. xiii figs. 33-34, Kobayashi (3).

Plomerops actinurus (Dalman) p. 217, Tjernvik.

Plomerops sp. I, *P. sp. II* p. 30, Bogdanov & Chugaeva.

Poletaevia gen. n. [? Proapatokcephalidae] p. 36 for type *P. shorica* [schorica on pl. expl.] sp. n. p. 37 pl. v figs. 15-19 Ordovician (Lower) U.S.S.R. (W. Siberia); *Pseudokainella* ? *macarenae* Harrington & Kay referred tentatively to *Poletaevia* p. 39, Rozova Trud. Inst. geol. geophiz. AN S.S.S.R. (Sib. Otd.) 5 1960.

Poliella sp. n. p. 205 pl. x figs. 6-8 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Poliellina sp. p. 206 pl. xii figs. 4-5, pl. vii fig. 7, Repina.

Poroscutellum Šnajdr 1958 discussed p. 132 (255), *P. porosum* (Barrande 1846) lectotype chosen and figd. p. 133 pl. xx figs. 1-11, pl. xxi fig. 1, text-fig. 45, *P. infastum* (B. 1852) with synonym *Bronteus gervillei* B. 1872 (both holotypes figd.) p. 136 pl. xxi figs. 2-5, *P. expectans* (B. 1872) holotype figd. p. 138 pl. xxi figs. 6-8, *P. indocile* (B. 1872) holotype figd. p. 139 pl. xxxii figs. 7-9, ? *P. acuspunctatum* (B. 1872) holotype figd. p. 139 pl. xix figs. 3-5, Šnajdr.

Portentosus Egorova discussed and considered allied to *Hukawasia* p. 243, Kobayashi (3).

Portentosus discussed and referred to Proapatokcephalidae fam. n. p. 43, *P. brevis* Egorova p. 44 pl. iv figs. 9-14, Rozova (2).

Poshania Chang discussed and referred to Ordosinae p. 372, Kobayashi (4).

Praedechenella Maksimova 1953 [not seen] p. 135, *P. imicivosa* M. text-figs. 311a-6, Chernysheva et al.

Prantlia longula (Hawle & Corda 1847) p. 209, Pfibyl.

Prehousia gen. n. [Housiidae] p. 77 for type *P. alata* sp. n. p. 78 pl. vii figs. 10, 12-13 text-fig. 14 (reconstr.), *P. semicircularis* sp. n. p. 78 pl. vii figs. 11, 14-15, 19 Cambrian (Upper) U.S.A. (Nevada), ventral cephalic sutures of *P.* text-fig. 8 d; N. gen. aff. *Aphelaspis* of Palmer & Hazzard 1956 belongs to *P.*, Palmer Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Pricyclopyge priaca (Barrande) text-fig. 558 b [see also *Cyclopyge*], Müller.

Prionopeltis archiaci see Hypostom F.

Prionopeltis sp. p. 350 [altered by hand to *Cyphoproetus rugosus* in offprint from author p. 352], Tomczykowa.

cf. *Proagnostus* sp. undet. p. 823, Lochman & Hu.

Proapatokcephalidae fam. n. [Olenoidae] p. 33 for *Apatokephalus*, *Proapatokcephalus*, *Proapatokcephalops* gen. n., *Menoparia*, *Scinocephalus*, *Diplapatokcephalus*, *Artokephalus*, *Apatokephalina*, *Portentosus*, *Apatokephaloides*, ? *Poletaevia* gen. n. p. 33, Rozova Trud. Inst. geol. geophiz. AN S.S.S.R. (Sib. Otd.) 5 1960.

Proapatokcephalops gen. n. [Proapatokcephalidae] p. 39 for type *P. oblongus* sp. n. p. 41 pl. iv figs. 1-6, *P. latus* sp. n. p. 42 pl. iv figs. 7-8 Cambrian (Upper) U.S.S.R. (Salair), Rozova Trud. Inst. geol. geophiz. AN S.S.S.R. (Sib. Otd.) 5 1960.

Proapatokcephalus referred to Proapatokcephalidae fam. n. p. 33, Rozova (2).

Proasaphiscus sp. p. 209 pl. ix fig. 8, Repina.

Probolium ? sp. α p. 97 pl. iv fig. 5, pl. vii fig. 14, *P.* ? sp. β p. 98 pl. iv [sic] figs. 1-3 Devonian (Middle) U.S.S.R. (Altai), Maksimova.

Proceratocephala terribilis bituberculata subsp. n. p. 107 pl. iii fig. 3, pl. xvi fig. 1 Ordovician (Upper) Poland (Lysa Gora), Kielan Palaeont. polon. No. 11 1960.

Prochuangia Kobayashi 1935 discussed p. 361, Kobayashi (4).

Prodamesella Chang 1959 discussed p. 352, Kobayashi (4).

Proerbia Lermontova discussed p. 147, *P. semota* sp. n. p. 148 pl. xiii fig. 13 text-fig. 48 Cambrian (Lower) U.S.S.R. (Siberian Platform), Suvorova Trud. paleont. Inst. S.S.S.R. 84 1960.

Proerbia torgaschinnica sp. n. p. 203 pl. viii figs. 7-8, *P.* cf. *priaca* Lermontova pl. 203 pl. xv figs. 5-6, *P.* sp. p. 203 pl. vii fig. 3, *P.* sp. p. 204 pl. xiii fig. 8 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Proerbiae Hupé a synonym of Dinesidae Lermontova p. 139, Suvorova.

Proetacea—Phillipsinellidae may have affinities p. 48, Kielan (1).

Proetid p. 412, Whittington (1).

Proetid hypostomes figured by Barrande 1852 pls. 15-17 discussed and assigned p. 196, Pfibyl.

Proetidella cf. *fearnsidei* Bancroft p. 167, Dean (3).

Proetina Pfibyl 1946 discussed with diagnosis and referred to Proetinae p. 209, *P. latimargo* P. 1946 including *Proetus luser* of Barrande 1872 (non 1852) p. 210, Pfibyl.

Proetinae—*Proetina* referred p. 210, Pfibyl.

Proetinae see *Ogmocnemis* gen. n.

Proetus bohemicus Cord., *P. natator* Barr. p. 44, Cogney.

Proetus (*Longiproetus*) *chamaeleo* R. & E. Richter, *P.* (*L.*) cf. *tenuimargo* R. & E. R. p. 160, Cavet.

Proetus conspersus (Ang.) p. 350, Tomczykowa.

Proetus (*Piriproetus*) *dormitans* Reinh. Richter 1863 p. 117 pl. xii figs. 10-12 text-fig. 1, *P. (Piriproetus) schaderthalensis* sp. n. p. 118 text-fig. 2 Devonian (Middle) Germany (Thüringia); *P. expansus* R. R. a synonym of *Phyllaspis raniceps* R. R. p. 123, Alberti Mitt. geol. Staatsinst. Hamb. 29 1960.

Proetus latifrons McCoy, *P.* sp. p. 178, Squirrel & Tucker.

Proetus lasutkini N. Tchern., *P.* sp. p. 121, Bel'skaya.

Proetus modestus Törnquist, *P. remotus* Warburg, *P. subornatus* Cooper & Kindle referred to *Ogmocnemis* gen. n. p. 69, Kielan (1).

Proetus (*P.*) *mofinensis* sp. n. Silurian (Middle) Bohemia p. 178 (204) pl. ii figs. 1-5, *P. (P.) retroflexus* Barrande 1852 p. 206 pl. i figs. 11-16, pl. iii figs. 1-2, pl. iv fig. 11, *P. (P.) signatus* Lindström 1885 lectotype selected p. 182 (207) pl. i figs. 17-22, *P. (subgen. ?) lusor* B. 1852 p. 208, *P. (Eremiproetus) insons* B. 1852, *P. (subgen. ?) moestus* B. 1852 p. 209, *P. (P.) ryckholti* B. pl. ii fig. 6; *P. l.* of B. 1872 referred to *Proetina latimargo* p. 210; *P. (Cornuproetus) dufrénoyi* see Hypostom A, *P. (C.)* sp. see Hypostom B, *P. (C.) complanatus* B. see Hypostom C, *P. (P.) neglectus* B. [lectotype chosen p. 193] see Hypostom D, *P.* sp. see Hypostom E, *Phylly* Shorn. Úst. úst. geol. 25 [Pal.] (for 1958) 1960.

Proetus (*P.*) *oehlerti* Bayle 1878 p. 39 pl. i figs. 6-7, *P. (P.) sibiricus* Tschernyschew 1893 lectotype chosen and figd. p. 40 pl. i figs. 9-10, *P. (P.) bohemicus supraconvexus* subsp. n. p. 41 pl. vi figs. 1-4 text-fig. 2, *P. (P.) ex gr. bohemicus* Hawle & Corda 1847 p. 44 pl. vii fig. 15, *P. (P.) aff. retroflexus* Barrande 1852 p. 45 pl. vi fig. 9, *P. [P. (P.) on table 1] pseudocarbonicus* sp. n. p. 46 pl. iii figs. 10-11, *P.* sp. for *Dalmanites* sp. T. 1893 p. 47 Devonian (Middle), *P. (Semiproetus ?) aff. sargaensis* Weber 1937 p. 48 pl. ix fig. 2, *P. (S. ?) ussuliensis* var. *altaica* W. 1937 p. 49 Carboniferous (Lower) U.S.S.R. (Altai); *P.* sp. T. 1893 referred to *Eremiproetus* cf. *eremita* p. 53, Maksimova Devonian and Carboniferous trilobites of the Rudny Altai 1960.

Proetus (*P.*) *orbitatus* Barr., *P. (P.) myops* B., *P. (Cornuproetus) complanatus* B., *P. (C.) buchi* (H. & C.), *P. (Unguliproetus) unguolobus* B., *P. (Eremiproetus) sp.* p. 350, Chlupáč & Vaněk.

Proetus postcarbonarius Gemmellaro referred to *Pernoproetus* p. 3, Ruggieri.

Proetus sp. pl. v figs. 18-19, Wilson & Majewske.

"*Proetus*" sp. a p. 181 pl. iii figs. 1-2, pl. xxi fig. 1, "P." sp. b p. 182 pl. xxi fig. 2, "P." sp. c p. 182 pl. xxv fig. 5 Ordovician (Upper) Poland (Lysa Gora), Kielan (1).

Proetus sp. indet. p. 269, Churkin & Langenheilm.

Prohedrinella erbiensis Sivov p. 213 pl. ix fig. 9, Repina.

Proloydia gen. n. [Lloydiniidae] for type *P. orientalis* sp. n. p. 365 pl. xx figs. 21-25, text-figs. 3 g-h Cambrian (Upper) S. Korea, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Protegalspides kazakhstanensis Balashova [nom. nud.] pl. v figs. 4-5, Chernysheva et al.

Prometeoraspis gen. n. [Tricriopiephalidae] for type *P. canotensis* sp. n. p. 17 pl. i figs. 16-17 Cambrian (Middle) Argentina (Mendoza), Poulsen Mat.-fys. Medd. danske Vid. Selsk. 32 11 1960.

Prosaugia Ulrich & Rosser discussed with list of Asian spp., *P. middlemissi* Reed excluded p. 406, Kobayashi (4).

Protobronteus gen. n. [Scutelluidae] for type *Eobronteus reedi* Sinclair p. 55 (245) Ordovician (Middle) Canada (Quebec), Šnajdr Rozpr. Úst. úst. geol. 26 1960.

Protolenid (almost certainly *Myopsolenus*) p. 103, BASSETT in Bassett & Walton.

Protolenidae see *Kameschkoviella* gen. n.

Protolenidae see *Krolina* gen. n.

Protolenus atlasensis, *P. singularis* n. spp. [nom. nuda] p. 81, Hupé (3).

Protolenus planus Pokrovskaya p. 177 pl. i fig. 16, Repina.

Protopliomerops kazakhstanicus Balashova [nom. nud.] pl. xi fig. 22, Chernysheva et al.

Protopliomerops punctatus Kobayashi [may belong to *Koraipis*] p. 261 pl. xiii figs. 14-15, Kobayashi (3).

Protoptychopyge gen. n. [Asaphinae] p. 125 for type *P. prisca* (Lamansky) 1905 for *Asaphus prisca* L. lectotype (Lesnikova 1949 pl. 69 figs. 1a, b) selected and figured including in synonymy *Ptychopyge plautini* of Schmidt 1907 partim (pl. 3 fig. 15) p. 126 pl. vii figs. 1-5 Ordovician (Lower) U.S.S.R. (Baltic), Balashova Paleont. Zhurnal 1959 4 1960.

Protoscutellum gen. n. [Scutelluidae] p. 63 (247) for type *Bronteus simulans* Barrande 1852 [lectotype chosen and figured] excluding B. pl. 48 figs. 31-32 (to *Kosovopeltis partschi* p.) p. 64 pl. ii fig. 7 Silurian Bohemia, Šnajdr Rozpr. Úst. úst. geol. 26 1960.

Pruvostina referred to *Bigotinopsidae* fam. n. p. 77, Hupé (3).

Pseudagnostus Jaekel 1909 discussed with remarks on pygidial morphology p. 7, *P. cavernosus* sp. n. p. 12 pl. i figs. 1-4, *P. vulgaris* sp. n. p. 14 pl. i figs. 5-13 text-fig. 4 Cambrian (Upper) U.S.S.R. (Salair), Rozova Trud. Inst. geol. geophiz. AN S.S.S.R. (Sib. Otd.) 5 1960.

Pseudagnostus Jaekel—some Rosser 1938 spp. of *Oedorhachis* [quod vide] may belong p. 13, Poulsen (2).

Pseudagnostus chinensis (Dames) p. 340, *P. cyclopygeformis* (Sun) excluding Endo 1937 partim p. 341 pl. xix figs. 6-7, *P. douvillei* (Bergeron) p. 333, Kobayashi (4).

Pseudagnostus communis (Hall & Whitfield) p. 61 pl. iv figs. 3-4, *P. prolongus* (H. & W.) pygidium newly referred [excluding Palmer 1955 pl. 19 fig. 18 to *P. sp.*] p. 61 pl. iv figs. 5-6, *P. ? acutus* (Kobayashi) lectotype selected and figured for *Homagnostus a. K.* p. 62 pl. iv figs. 10-12, Palmer (1).

Pseudagnostus convergens p. 43, Lochman-Balk.

Pseudagnostus sp. cf. *P. prolongus* (Hall & Whitfield) p. 812 pl. xcv fig. 36, Lochman & Hu.

Pseudosaphus limatus Jaanusson 1953 pygidial variation discussed p. 245 pl. ix fig. 4, pl. xiii figs. 1-5, *P. sp.* p. 247 pl. xiii fig. 6, Henningsmoen.

Pseudobasiliscus cf. *kuckersianus* (Schmidt 1898) p. 247 pl. xiii fig. 7, *P. cf. kegelensis* (S. 1898) p. 247 pl. xiv figs. 1, 4, ? 8, *P. ? sp.* p. 248 pl. xiv figs. 2-3, Henningsmoen.

Pseudocobboldia n. gen. [nom. nud.] p. 76, Hupé (3).

Pseudoetaspis angarensis Chernysheva 1950 [not seen] p. 214 pl. v figs. 10-14, pl. viii figs. 4-5 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina.

Pseudogygites latimarginatus (Hall) description of ascribed degree 3 meraspis p. 1118 pls. i-ii, *P. canadensis* (Chapman) [type of *P.*] probably synonymous with *P. l.* p. 1120, Fritz.

Pseudokainella iwaiyai Kobayashi p. 245 text-fig. 6a, *P. a* [α] sp. K. 1953 p. 246, *P. ? sp. nov.* p. 246 pl. xii fig. 1 text-fig. 5d [where called *P. ? sp. indt.*], "*P. ? maladiformis* (K.) for *Mansuyia m. K.* p. 242 text-fig. 5e; *P. ? β sp. K.* 1953 referred to *Aotiaspis* gen. n. p. 248, Kobayashi (3).

Pseudokainella ? macarenae Harrington & Kay referred tentatively to *Poletaevia* gen. n. p. 39, Rozova (2).

Pseudokoldinioidia Endo 1944 discussed and referred to *Dorypygidia* p. 349, Kobayashi (4).

Pseudolenus tenuifrons n. sp. [nom. nud.] p. 81, Hupé (3).

Pseudomegalaspis patagiata (Törnquist 1884) including *P. formosa* of Jaanusson 1953 partim (pl. 10 figs. 2-3) p. 248 pl. xii figs. 1-7, relations and possible synonymy of *P. p.* and *P. f.* p. 249, *P. ? sp.* p. 251 pl. xii fig. 8, Henningsmoen.

Pseudophillipsia croatica Simić sp. n. for *Ps. n.* sp. S. 1938 p. 31 (38) Carboniferous (Upper) Croatia, Schröter Földt. Kozl. 78 1948 [omitted Z. R. 90 11 (for 1952) 1955].

Pseudophillipsia croatica Schröter 1948 a synonym of *Paladin mucronatus* p. 47n, Bouček & Přibyl.

Pseudosaratogia leptogranulata sp. n. p. 101 pl. xi fig. 10, *P. abnormis* sp. n. p. 101 pl. xi fig. 11 Cambrian (Upper) U.S.A. (Nevada), Palmer Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Pseudosolenopleura Sun discussed p. 378, Kobayashi (4).

Pseudosphaerexochus octacanthus (Angelin 1854) for *Cyrtometopus o. A.* restr. [non pl. 22 fig. 6] lectotype [fig. 6a] selected and refigured p. 134 pl. xxv fig. 7, *P. wolkei* sp. n. p. 134 pl. xxiv figs. 5a-b, pl. xxv figs. 1-2, text-fig. 37, *P. laticeps* (Linnarsson 1869) recorded p. 137, *P. sp. a* p. 137 pl. xxiv figs. 6-7, *P. sp. b* p. 138 pl. xxv figs. 6a-c, *P. sp. c* p. 139 pl. xxiii fig. 1 Ordovician (Upper) Poland (Lysa Gora), Kielan Palaeont. polon. No. 11 1960.

Pseudotermierella n. gen. [nom. nud.] [Termierellidae] p. 77, Hupé (3).

Pterocephalia Roemer 1849 discussed and variation analysed p. 86, ventral cephalic sutures text-fig. 8a, *P. concava* sp. n. p. 88 pl. ix figs. 1-6, 9-12, *P. elongata* sp. n. p. 88 pl. ix figs. 14-20 Cambrian (Upper) U.S.A. (Nevada), *P. sanctisabae* R. with all Resser's 1938 spp. (including *P. bridgei*) as synonymy p. 88 pl. ix figs. 7-8, 13 text-fig. 19 (reconstr.), *P. occidentis* Walcott holotype figured and considered indeterminate p. 88 pl. ix fig. 21, *P. cf. P. e.* for *P. cf. P. o.* of Palmer 1954, Palmer Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Pterocephalia bridgei Resser p. 814 pl. xevi figs. 28-33, Lochman & Hu.

Pterocephaliidae discussed and classified into *Aphelaspidinae subfam. n.* and *Pterocephalinae*; *Pterocephalops*, *Nericia* and *Grünwallia* may belong p. 80, Palmer (1).

Pterocephaliidae see *Anechocephalus* gen. n.

Pterocephaliidae see *Hypostomes* A-D.

Pterocephaliidae (Aphelaspidinae) see *Taenora* gen. n.

Pterocephalinae discussed p. 84 and taken to include *Pterocephalia*, *Cernuolimbus* and *Sigmocheilus* gen. n. and possibly *Anechocephalus* gen. n., *Nericia septemdentata* and *Dikelocephalites flabelliformis* Sun, Palmer (1).

Pterocephalinae see *Cernuolimbus* gen. n.

Pterocephalinae see *Sigmocheilus* gen. n.

Pterocephalina grata, *notha*, *yoganipensis*, *utahensis* Resser 1942 spp. referred to *Sigmocheilus* gen. n. with *P. cf. P. g.* of Wilson 1954, *P. texana* R. probably referable to *Labiostria* p. 90, Palmer (1).

Pterocephalops may belong to *Pterocephaliidae* p. 80, Palmer (1).

Pterygomotopinae discussed p. 8, Pillet (3).

Pterygomotopinae see *Liocnemis* gen. n.

Pterygomotopus Schmidt 1882 discussed p. 8 and classified into *P. (Pterygomotopus)*, *P. (Achatella)*, *P. (Truncatometopus)* subgen. n. p. 9 for type *Phacops truncatocaudatus* Portlock 1843 text-fig. 4b also including *trigonocephalus*, *kuckersiana*, *nieszkowskii* and *kegelensis* Schmidt spp.; *P. (P.) dagon* Reed 1915 [including *Dalmanitina proceva* of Bordet et al. 1959 p. 5n] p. 9 pl. i figs. 1-3 text-fig. 5 b, Pillet Bull. Soc. géol. Fr. (7) 2 1 1960.

Ptychagnostus punctuosus (Angelin) p. 10, **Noakes et al.**

Ptychagnostus sp. text-fig. 4j, **Whittington** (3).

Ptychocheilus discretus table 1 p. 6, **Volk**.

Ptychometopinae subfam. n. [Pharostomidae] for *Ptychometopus* Schmidt p. 161, **Balashova** Principles of Palaeontology. Arthropods—Trilobitomorpha and Crustaceans 1960.

Ptychometopus referred to *Ptychometopinae* subfam. n. p. 161, **Chernysheva et al.**

Ptychometopus—*Endocrania* compared p. 41, **Kobayashi** (1).

Ptychoparia striata (Emmrich) text-fig. 536, **Müller**.

Ptychopariida—list of suborders including *Calymenina* p. 233, **Kobayashi** (3).

Ptychopariidae discussed p. 127, **Suvorova**.

Ptychopariidae—*Lermontoviella* Pokrovskaya referred p. 201, **Repina**.

Ptychoparioidea see *Anechocephalus* gen. n.

Ptychoparioidea see *Minupeltis* gen. n.

Ptychoparioidea see *Morosa* gen. n.

Pumilina gen. n. [Aldoniidae] for type *P. pandica* sp. n. p. 220 pl. xv figs. 13-15 Cambrian (Lower) U.S.S.R. (E. Sayan), **Repina** Regional Strat. S. S.S.R. 4 1960.

Quadricephalus Sun discussed with list of referred spp. p. 401, *Q. coreanicus* sp. n. for *Q. manchuricus* of Kobayashi 1935 *partim* (pl. 6 figs. 1-5) p. 402 pl. xx figs. 2-6, [7], pl. xxi fig. 13, text-figs. 12d-e, *Q. quadratus* K. p. 402 pl. xix fig. 11, *Q. elongatus* K. for *Q. m.* of K. 1935 *partim* (pl. 6 figs. 6-7) Cambrian (Upper) S. Korea, *Q. m.* pl. xix fig. 13, **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Raaschella Lochman 1938 silently synonymised with *Glaphyraspis* Resser 1937 p. 279, **Rasetti** in **Harrington et al.** [omitted Z.R. 96 11].

Raaschella occidentalis Lochman referred to *Glaphyraspis* p. 815, **Lochman & Hu**.

Radiaspis radiata (Goldf.) p. 350, **Chlupáč & Vaněk**.

Raphiophoridae see *Ampyzella* gen. n.

Raphiophorus see *Rhaphiophorus*.

Raphiophorus tenellus (Barrande 1872) p. 165 pl. xxxv fig. 6, *R. gratus* (B. 1872) with synonyms *Ampyz globifrons* Olin 1906 [and *Dindymene venusta* O. refigured p. 147] p. 166 pl. xxxii fig. 6, pl. xxxiii figs. 4-5, pl. xxxvi fig. 7, text-fig. 48, *R. acus* (Troedson 1918) [may be a synonym of *R. setirostris* Angelin] p. 168 pl. xxxii figs. 4a-b, pl. xxxv fig. 7, *R. cf. a.* p. 169; *R. depressus* A. a synonym of *Lonchodomas portlocki* (B.) p. 171, **Kielan** (1).

Raymondella nordica sp. n. p. 37 [pl. vi figs. 15-16] Ordovician (Middle) U.S.S.R. (Arctic), **Balashova** Sborn. stat. paleont. biostrat. 17 [pls. in 14] 1960.

Reacalymene limba Shirley p. 158, **Whittard**.

? *Reacalymene pumilosa* Shirley p. 167, **Dean** (3).

Redlichia satoi Lu p. 343, **Kobayashi** (4).

Redlichia ? sp. p. 10 pl. i fig. 10, **Poulsen** (1).

Redlichina vologdini Lermontova p. 177 pl. xiii fig. 5, *R. exacuta* sp. n. p. 177 pl. xiii figs. 1-4 Cambrian (Lower) U.S.S.R. (E. Sayan), **Repina** Regional Strat. S.S.S.R. 4 1960.

Reedocalymeninae discussed and referred to *Synhomalonotidae* fam. n. p. 45, **Kobayashi** (1).

Remopleurides text-figs. 3 A-C, **Whittington** (2).

Remopleurides ? sp. a p. 67 pl. iii fig. 10, *R. ?* sp. b p. 68 text-fig. 16 Ordovician (Upper) Poland (*Lysa Góra*), **Kielan** (1).

Resseropsis gen. n. [nom. nud.] [Neoredlichiidae] p. 76, **Hupé** (3).

Reuscholithus reuschi Bancroft holotype figured and immature cephalons described p. 91 pl. xiv figs. 1-14, **Dean** (1).

Rhaphiophorus [sic] sp. p. 116, **Lawson**.

Richardsonella flabellifera (Hall & Whitfield) discussed p. 243, **Kobayashi** (3).

Richardsonellidae Raymond discussed p. 230, *Apatokephalina* probably referable p. 242, **Kobayashi** (3).

Rincónia pardailhensis, *R. angusta* n. spp. [nom. nuda] p. 82, **Hupé** (3).

Rochaewi n. gen. [nom. nud.] [Termierellidae] p. 77, **Hupé** (3).

Rondocephalus mirandus Pokrovskaya p. 205 pl. vii figs. 8-9, **Repina**.

Rudagnostus referred to *Geragnostidae* p. 234, **Kobayashi** (3).

Sajanaspis gen. n. [Dolerolenidae] p. 196 for type *S. pokrovskajae* sp. n. p. 197 pl. xi figs. 1-2, *S. modesta* sp. n. p. 197 pl. xi fig. 4, *S. sp.* pl. xi fig. 3, *S. sp.* pl. xii fig. 8 Cambrian (Lower) U.S.S.R. (E. Sayan), **Repina** Regional Strat. S.S.S.R. 4 1960.

Salterolithus Bancroft 1929 discussed p. 95, *S. caractaci* (Murchison) including *S. sp. nov.* Dean 1958 p. 96 pl. xv figs. 1-2, 4, 6, 9, *S. praecursor* sp. n. including *S. sp. B.* 1929 p. 98 pl. xv figs. 3, 5, 7-8, 10-12 Ordovician (Middle) Britain (Shropshire); *S. smeathenensis* B. 1949 type of *Smeathenia* gen. n. p. 100, *S. harnagensis* B. referred to *Broeggerolithus* p. 105, **Dean** Bull. Brit. Mus. (nat. Hist.) [Geol.] 4 4 1960.

Sao hirsuta Barrande text-fig. 547, **Müller**.

Saukia Walcott discussed with list of Asian spp., *S. vagans* Reed excluded p. 405; *S. sp.* listed p. 335, Kobayashi (4).

Saukiella sp. for *Calvinella sp.* of Kobayashi 1935 p. 407 pl. xix fig. 30, Kobayashi (4).

Saukiinae discussed p. 403, Kobayashi (4).

Saukiinae see *Platysaukia* gen. n.

Sayanella Pokrovskaya 1959 a synonym of *Botomella* Suvorova 1958 p. 149, Suvorova.

Scabriscutellum see *Scutellum*.

Scabriscutellum R. & E. Richter 1956 discussed p. 140 (256), *S. oblongum* (Hawle & Corda 1847) lectotype chosen and figd. p. 142 pl. xxv figs. 12-14, pl. xxvi figs. 1-3, 10, *S. caelebs c.* (Barrande 1852) lectotype chosen and figd. with synonym *Bronteus gigas* H. & C. lectotype chosen and figd. p. 143 pl. xxvi figs. 4-9, pl. xxvii fig. 13, text-fig. 46, *S. caelebs consimile* subsp. n. p. 145 (256) pl. xxvi fig. 11, pl. xxvii fig. 1, *S. holynense* sp. n. p. 146 (257) pl. xxvi fig. 12, *S. elongatum* (B. 1846) holotype figd. p. 147 pl. xxviii figs. 11-12, *S. richteri* (B. 1852) with synonym *B. tardissimus* B. 1872 (both holotypes figd.) p. 148 pl. xxvii figs. 2-3, *S. billingsi* (B. 1872) holotype figd. p. 150 pl. xxviii fig. 13 text-fig. 4, *S.* (nov. subg. ?) *furciferum* (H. & C. 1847) lectotype chosen and figd. with synonym *Scutellum analogum* Prantl 1949 holotype figd. p. 152 pl. xxvii figs. 4-12, pl. xxviii figs. 1-7 text-fig. 47, *S. sp.* pl. v fig. 1 Devonian (Middle) Bohemia, Šnajdr Rozpr. Úst. úst. geol. 26 1960.

Scabriscutellum sibiricum (Tschernyschow 1893) holotype figured p. 32 pl. i figs. 2-4, pl. iv fig. 4, *S. aff. scabrum* Goldfuss 1843 p. 34 pl. i fig. 5, Maksimova.

Schistocephalus sibiricus sp. n. p. 214 pl. xvi figs. 10-11 Cambrian (Middle) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Scinocephalus referred to Proapatokcephalidae fam. n. p. 33, Rozova (2).

Scotiella sp. p. 350, Tomczykowa.

Scutelluidae (Hawle & Corda 1847) R. & E. Richter 1925 discussed and *Dulanaspis* excluded p. 53 (245), Šnajdr.

Scutelluidae R. & E. Richter preferred [to Thysanopeltidae] p. 415, Whittington (1).

Scutelluidae see *Breviscutellum*, *Cornuscutellum*, *Metascutellum*, *Microscutellum*, *Protobronteus*, *Protoscutellum*, *Spiniscutellum* gen. n.

Scutellum Pusch 1833 discussed p. 181 (259), *S. edwardsi* (Barrande 1852) lectotype chosen and figd. p. 182 pl. vii fig. 10, pl. ix figs. 6-12, text-fig. 56; *S. lanceolatum* Prantl & Přibyl a synonym of *Kolihapeltis parabolina* p. 165, *S. přibyl* Prantl of *Spiniscutellum umbelliferum* p. 113, *S. analogum* P. of *Scabriscutellum furciferum* p. 152, *S. novaki* & *S. bohemicum* Prantl & Přibyl of *Breviscutellum inerme* p. 174, *S. gaudryi* P. & P. of *Metascutellum pustulatum* p. 185, Šnajdr.

Scutellum alutaceum Goldfuss 1843 p. 27 pl. viii fig. 7, *S. longicaudatum* Maksimova 1955 p. 29 pl. viii figs. 1-5, *S. elegans* Peetz [Petta] 1901 p. 30 pl. iii fig. 9, *S. cf. orientalis* M. 1955 p. 31 pl. viii fig. 6, Maksimova.

Scutellum (*S.*) *brevifrons* (Barr.), *S. (S.) oblongum* (H. & C.), *S. (Scabriscutellum) elongatum* (B.) p. 350, Chlupáč & Vaněk.

"*Scutellum*" *multiverrucatum* sp. n. for *Bronteus pustulatus* of Barrande 1852 partim (pl. 48 figs. 13-16) and 1872 p. 202 (262) pl. xxxv figs. 1-5, "*S.*" *obscureum* sp. n. p. 203 (262) pl. xxxv figs. 6-7, "*S.*" *asperulum* (B. 1872) holotype figd. p. 204 pl. xxxv figs. 8-10, "*S.*" *setosum* Prantl 1949 holotype figd. p. 205 pl. xxxv fig. 17, "*S.*" *schöbli* (Novák 1884) lectotype chosen and figd. p. 206 pl. xxxv figs. 11-13, "*S.*" *sieberi* (Hawle & Corda 1847) lectotype chosen and figd. p. 208 pl. xxxvi figs. 1-2 Devonian (Lower) Bohemia, Šnajdr Rozpr. Úst. úst. geol. 26 1960.

Scutellum paliferum (Boyerich) text-fig. 564 B, Müller.

Scutellum (*Thysanopeltis*) *speciosum speciosum* (Hawle et Corda 1847) em. Prantl 1950 p. 336 pl. ii fig. 11, Štrnad (1).

Scutellum viator Barr. p. 45, Cogney.

Scutellum sp. p. 160, Cavet.

Scutellum sp. indet. p. 269, Churkin & Langenheim.

Seleneceme Clark 1924 discussed p. 117, *S. acuticaudata* (Hicks) for *Illeanopsis* ? a. H. holotype figured p. 118 pl. xvi figs. 1-5, Whitard.

Semiproetus see *Proetus*.

Serkeia n. gen. [nom. nud.] [Olenellid] p. 76, *S. cordiformis* n. sp. [nom. nud.] p. 81, Hupé (3).

Serksioidea n. gen. [nom. nud.] [Olenellid] p. 76, Hupé (3).

Serrodiscus see *Eodiscoid* ?

Shantungia (*Metashantungia*) Chang 1959 [not seen] discussed p. 353, *S. (M.) brevis* C. text-fig. 2q, *S. (Parashantungia)* Chu 1959 [not seen] discussed p. 353, *S. (P.) elongata* C. text-fig. 2 p, Kobayashi (4).

Shirakiella Kobayashi 1935 discussed with synonym *Mansuyella* Endo p. 390, *S. ?* sp. p. 390 pl. xxi [sic] fig. 12, *S. elongata* K. pl. xix fig. 26, *S. laticonveza* K. p. 334, Kobayashi (4).

Shivelicus parvus Pokrovskaya p. 175 pl. vii fig. 11, Repina.

Shumardia pellizzarii Kobayashi 1934 p. 235 pl. xiii figs. 23-25, Kobayashi (3).

Shumardia polonica sp. n. p. 159 pl. xxxii fig. 5 text-fig. 45 Ordovician (Upper) Poland (Lysa Góra), Kielan Palaeont. polon. No. 11 1960.

Shumardia pusilliformis Poletaeva [not seen] pl. iv fig. 20, Chernysheva et al.

Sigmocheilus gen. n. [Pterocephalinae] p. 89 for type *S. serratus* sp. n. p. 91 pl. x figs. 1-3 text-fig. 20 (reconstr.), *S. grata* (Resser) for *Pterocephalina* g. R. p. 90 pl. ix figs. 22-23, 26-27, *S. pogonipensis* R. for *P. p. R.* p. 91 pl. x figs. 4-7, *S. utahensis* (R.) for *P. u. R.* p. 91 pl. ix figs. 24-25, 28 Cambrian (Upper) U.S.A. (Nevada); *P. notha* R., *P. cf. P. g.* of Wilson 1954 and *Idingsia ? guinnensis* R. also referred to *S. p. 90*, *Labiostria sigmoidalis* Palmer related to *S. p. 80*, Palmer Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Sinosaukia Sun discussed p. 404, Kobayashi (4).

Sinskia gen. n. [Holmiinae] p. 18 for type *S. optabilis* sp. n. p. 19 pl. i figs. 1-4 text-fig. 2 Cambrian (Lower) U.S.S.R. (Siberian Platform), Suvorova Trud. paleont. Inst. S.S.S.R. 84 1960.

Smeathenia gen. n. [Trinuoleidae] for type *Salterolithus smeathenensis* Bancroft 1949 lectotype selected and figured p. 100 pl. xiii figs. 7, 10-16 Ordovician (Middle) Britain (Shropshire), Dean Bull. Brit. Mus. (nat. Hist.) [Geol.] 4 4 1960.

Solenoparia Kobayashi with discussion of referred spp. p. 379, *S. laevis* sp. n. p. 380 pl. xix figs. 14 a-b, 15-16 Cambrian (Middle) S. Korea, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Solenopariinae discussed p. 378, Kobayashi (4).

Solenopleurella kolbinica sp. n. p. 200 pl. v figs. 7-9 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Solenopleurellinae see *Litaspis* gen. n.

Solenopleuridae discussed p. 376, see also Menocephalitinae subfam. n. p. 380, Kobayashi (4).

Spathacalymene gen. n. [Calymeninae] p. 892 for type *Calymene nasuta* Ulrich 1879 lectotype selected and figured p. 893 pl. cxvi figs. 1-12 Silurian (Middle) U.S.A. (Indiana), Tillman J. Paleont. 34 5 1960.

Sphaeragnostus gaspensis europeensis subsp. n. p. 56 pl. i figs. 1-3 text-fig. 11 Ordovician (Upper) Poland (Lysa Gora), Kielan Palaeont. polon. No. 11 1960.

Sphaerexochus aff. *mirus* Beyrich 1845 p. 11 pl. i figs. 8-9, text-fig. 5c, Pillet (3).

Sphaerexochus taimyricus sp. n. p. 29 [pl. v figs. 8 a-6] Ordovician (Upper) U.S.S.R. (Arctic), Balashova Sborn. stat. paleont. biostrat. 17 [pls. in 14] 1960.

Sphaerexochus sp. p. 31, Bogdanov & Chugaeva.

Sphaerocoryphe Angelin 1854—proposed designation of *S. dentata* A. 1854 as type p. 232, Stubblefield & Henningsmoen.

Sphaerocoryphe cf. *thompsoni* (Reed) p. 334, Cave.

Sphaerometopus Angelin 1854—proposed suppression p. 232, Stubblefield & Henningsmoen.

Spiniscutellum gen. n. [Scutellitidae] p. 111 (254) for type *S. umbelliferum* (Beyrich 1845) for *Bronteus umbellifer* B. neotype chosen and figd. [excluding Prantl & Pfibyl 1947 partim (pl. 6 fig. 2 to *Decoroscutellum hanufl*) and with synonyms *B. sparsus* Hawle & Corda (lectotype chosen and figd.) and *Scutellum pfibyl* Prantl (holotype figd.) and including *S. partichi* of Howell 1951] p. 112 pl. viii figs. 1-19, pl. ix figs. 1-4, pl. xxxvi fig. 12, text-figs. 5, 39-40 Silurian (Upper) and Devonian (Lower) Bohemia, Šnajdr Rozpr. Úst. úst. geol. 26 1960.

Staurocephalus clavifrons Angelin 1854 p. 156 pl. xxiv fig. 9, pl. xxvi figs. 7-9, Kielan (1).

Stigmagnostus gen. n. [Agnostidea (? Peronopsinae)] for type ? *Tomagnostus canotensis* Rusconi 1951 [re-interpreted as a pygidium] p. 15 pl. i figs. 11-12 Cambrian (Middle) Argentina (Mendoza), Poulsen Mat.-fys. Medd. danske Vid. Selsk. 32 11 1960.

Strenuella strenua (Billings) from Morocco p. 77, Hupé (3).

Stubblefieldia sp. p. 139 pl. xiii figs. 5a-b, pl. xxiv fig. 8, pl. xxv figs. 8a-b; *S. neglecta* of Barande 1872 partim [pl. 3 fig. 18] probably belongs to *Actinopeltis insocialis* (B.) p. 140, Kielan (1).

Stygina sp. p. 30, Bogdanov & Chugaeva.

Stygina sp. (conspecific with Skjeseth 1955 pl. 2 fig. 3) p. 82 pl. viii figs. 1-2, Kielan (1).

Symphysops subarmata elongata subsp. n. p. 90 pl. xi figs. 1-4, *S. sp. a* [may belong to *S. a. e.*] p. 92 pl. xi fig. 6, *S. sp. b* p. 92 pl. xi fig. 5 Ordovician (Upper) Poland (Lysa Gora), Kielan Palaeont. polon. No. 11 1960.

Symphysurina brevispicata p. 43, Lochman-Balk.

Symphysurus angustatus Sars & Boeck pp. 216, 217, Tjernvik.

Symphysurus convexus Balashova [nom. nud.] pl. vi figs. 20-21, Chernysheva et al.

Symphysurus superstes Olin 1906 restr. lectotype selected and a synonym of *Microparia speciosa* [q.v.], *S. s. o. partim* (pl. 3 fig. 6) referred to *Panderia megalophthalma* p. 90, *S. s. of Wiman* 1907 is an Illaenid p. 90, Kielan (1).

Synhomalonotidae fam. n. [Calymenacea] p. 42 for Synhomalonotinae and Reedocalymeninae, Kobayashi Japan. J. Geol. Geogr. 31 1 1960.

Synhomalonotinae subfam. n. [Synhomalonotidae] for *Synhomalonotus* and *Vietnamia* gen. n. p. 42, Kobayashi Japan. J. Geol. Geogr. 31 1 1960.

Synhomalonotinae see *Vietnamia* gen. n.

Synhomalonotus Pompeckj 1898 a synonym of *Nesuretus* Hicks [q.v.] p. 139, Whittard.

Synhomalonotus Pompeckj discussed with list of spp. and referred to Synhomalonotidae (Synhomalonotinae) subfam. n. p. 42, "*S. birmanicus* (Reed) text-fig. 2e; *S. kobayashii* Harrington & Leanza may not belong p. 45, Kobayashi (1).

Synomalonotus fedalensis n. sp. [nom. nud.] p. 1538, Destombes et al.

Synphoroides sp. pl. vi figs. 15-17, Wilson & Majewski.

Taenicephalus quinnensis Resser referred to *Elburgia* gen. n. [q.v.] p. 69, Palmer (1).

Taenicephalus shumardi (Hall) with immature stages and including *T. cordillerensis* of DeLand & Shaw 1956 (pl. 67 fig. 3) p. 811 pl. xcv figs. 12-23, 31, T. sp. undet. p. 798, Lochman & Hu.

Taenora gen. n. [Pteroccephaliidae (Aphelaspidae)] p. 83 for type *T. expansa* sp. n. p. 84 pl. vii figs. 20-23 text-fig. 17 (reconstr.) Cambrian (Upper) U.S.A. (Nevada); *Labiostria platifrons* Palmer tentatively referred to *T.* p. 84, Palmer Prof. Pap. U.S. geol. Surv. No. 334-C 1960.

Taihungshania Sun discussed and Chinese spp. grouped into two series p. 256, Kobayashi (3).

Taihungshaniidae discussed p. 256, Kobayashi (3).

Taipaikia gen. n. [Taninidae] for type *Paramanuyella glabra* Endo p. 398 pl. xxi figs. 20-21, ? pl. xx fig. 18, text-fig. 11h Cambrian (Upper) Manchuria and Korea, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Taitzechia Chu 1959 [not seen] discussed p. 352, T. wangi C. text-fig. 2g, Kobayashi (4).

Taitzia Resser & Endo referred to Ordosiniidae and spp. discussed p. 371, Kobayashi (4).

Talbotina see Genus and species undet. 2.

Talbotinella gen. n. [Lonchocephaliidae] p. 23 for type *T. communis* sp. n. p. 24 pl. ii figs. 2-8, pl. iii fig. 2, *T. leanzai* sp. n. p. 25 pl. ii figs. 9-12, *T. rusconii* sp. n. p. 27 pl. ii figs. 13-15 Cambrian (Middle) Argentina (Mendoza), Poulsen Mat.-fys. Medd. danske Vid. Selsk. 32 11 1960.

Tazemmourtia n. gen. [nom. nud.] [Bigotinopsidae] p. 77, Hupé (3).

Tellerina Ulrich & Resser with list of Asian spp. p. 406, *T. coreanica* Kobayashi listed p. 334, Kobayashi (4).

Terechtaaspis gen. n. [Komaspidae] for type *T. coronaria* sp. n. p. 208 pl. xiii figs. 6-7 Cambrian (Lower) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Terranovella see Genus and species undet. 1.

Thaleops sp. p. 29, Bogdanov & Chugaeva.

Thysanopeltis Hawle & Corda 1847 discussed p. 156 (257), *T. speciosa* H. & C. 1847 neotype chosen and figd. [with synonyms *Bronteus thysanopeltis* Barrande 1852, *Scutellum* (*T.*) *s. abbreviatum* and *s. redivivum* Prantl 1949 both holotypes figd.] p. 157 pl. xxix figs. 4-8, pl. xxx figs. 1-14, pl. xxxi figs. 1-4 text-fig. 48, *T. clementina* (B. 1872) holotype figd. p. 162 pl. xxix figs. 1-2 text-fig. 49, Šnajdr.

Thysanopeltis paucispinosa sp. n. p. 137 pl. i figs. 5a-c Devonian (Middle) Japan (Iwate), Okubo Earth Science [Chikyū Kagaku] No. 4 1951.

Thysanopeltis see *Scutellum*.

Tingocephalinae Hupé referred provisionally to Kaolishaniidae p. 355, Kobayashi (4).

Tingocephalinae see *Kabutocrania* gen. n.

Tingocephalus Sun discussed, *T. concavolimbatus* (Endo) discussed p. 357, *T. magnus* sp. n. p. 358 pl. xx fig. 17 Cambrian (Upper) S. Korea, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 12 2 1960.

Tolstotichaspis gen. n. [Plethopeltidae] p. 59 for type *T. grandis* sp. n. p. 60 pl. vii figs. 11-20 Cambrian (Upper) U.S.S.R. (Salair), Rozova Trud. Inst. geol. geophiz. AN S.S.S.R. (Sib. Otd.) 5 1960.

? *Tomagnostus canotensis* Rusconi reinterpreted as pygidium and type of *Stigmagnostus* gen. n. [q.v.] p. 15, Poulsen (2).

Tonkinella orientalis Kobayashi p. 212 pl. xvii figs. 9-10, *T. sisimica* sp. n. p. 212 pl. xvii figs. 1-8 Cambrian (Middle) U.S.S.R. (E. Sayan), Repina Regional Strat. S.S.S.R. 4 1960.

Tretaspis granulata (Wahlenberg 1818) restr. type refigured with synonyms *Trinucleus bucklandi* Barrande restr. and *T. elliptifrons* Olin p. 171 pl. xxxiii figs. 1-3, pl. xxxiv figs. 1-2, pl. xxxv figs. 1-2, pl. xxxvi fig. 6, text-fig. 49 (graph), *T. seticornis seticornis* Starmer 1945 [sic] including *T. b. B. 1852 partim* (pl. 29 fig. 10, pl. 30 figs. 14-16) p. 174 pl. xxxiii fig. 6, Kielan (1).

Tretaspis moeldenensis sp. n. p. 334 pl. x figs. 1-7 Ordovician (Upper) Britain (S. Wales); *T. kieri* of King & Williams 1948 [non fig.] and *T. aff. k.* of Lamont 1945 are similar to *T. m.*, *T. cf. k.* of Whittington 1938 may be new sp. p. 336, Cave Geol. Mag. 97 4 1960.

Triorepicephalidae see *Prometeoraspis* gen. n.

Triorepicephalus sp. cf. *T. coria* Walcott p. 817 pl. xvii figs. 21-26, *T.* sp. undet. p. 816, Lochman & Hu.

Trilobites asellus Esmark referred to *Ogmocnemis* gen. n. p. 69, Kielan (1).

Trilobites sp. [evidently new genus, probably new family] p. 178 pl. iii figs. 4-5, pl. xxi fig. 3 Ordovician (Upper) Poland (Lyssa Gora), Kielan (1).

Triniidae referred to *Corynexochioidea* p. 78, Chernysheva et al.

Trinodus tardus (Barrande 1846) with synonym *Agnostus glabratus* Angelin p. 59 pl. i figs. 6-13 text-fig. 13, *T.* sp. p. 62 pl. i fig. 5 text-fig. 14; *Dindymene minuta* Reed 1931 may be part of a *Trinodus* p. 147, Kielan (1).

Trinucleid p. 141, Cavet.

Trinucleidae discussed with list of genera p. 84, evolution in Shropshire p. 138, Dean (1).

Trinucleidae see *Smeathenia* gen. n.

Trinucleus bucklandi Barrande and *T. elliptifrons* Olin synonyms of *Tretaaspis granulata* (Wahlenberg) p. 171, *Kielan* (1).

Trinucleus discors Angelin may belong to *Broeggerolithus* p. 104, *T. gibbifrons* McCoy suggested that name be rejected, *T. g.* of Reed 1914 resembles *B. globiceps* p. 104 [see also *Cryptolithus*], *Dean* (1).

Trinucleus sp. p. 31, *Bogdanov & Chugaeva*.

Trochurus sp. indet. p. 269, *Churkin & Langenheim*.

"*Trochurus*" sp. p. 350, *Tomezykova*.

Tropidocoryphe filicostata (Novák 1890) p. 337 pl. iii figs. 12-13, *Strnad* (1).

Tropidocoryphinae—*Phyllaspis* tentatively referred p. 119, *Alberti*.

Tropidopyge Harrington & Kay discussed with implied reference to Birmanitidae fam. n. p. 256, *Kobayashi* (3).

Truncatometopus subgen. n. see *Pterygomelopus*.

Tainania canens (Walcott) p. 398, *T. ceras* (W.) p. 335, *Kobayashi* (4).

Tainaniidae discussed and *Esseigania*, *Koldiniella*, *Kazelia*, *Jubileia* may belong p. 396, *Kobayashi* (4).

Tainaniidae see *Taipaikia* gen. n.

Tumulina gen. n. [Dinesidae] p. 204 for type *T. tumida* sp. n. p. 205 pl. xii figs. 1-3 Cambrian (Lower) U.S.S.R. (E. Sayan), *Repina* Regional Strat. S.S.S.R. 4 1960.

Tungusella gen. n. [Neoredlichiiidae] p. 178 for type *T. manica* sp. n. p. 179 pl. iv figs. 5-9, *T. obesa* sp. n. p. 181 pl. iv figs. 10-14 Cambrian (Lower) U.S.S.R. (E. Sayan), *T. nitens* and *T. procera* (Suvorova spp.) transferred from *Bergeronia* sp. p. 179, *Repina* Regional Strat. S.S.S.R. 4 1960.

Ullaopsis [Westergård] may belong to *Housiidae* p. 74, *Palmer* (1).

Ulricholithus Bancroft 1949 a synonym of *Broeggerolithus* pp. 86, 102, *Dean* (1).

Uncaopsis sp. undet. p. 816 pl. xviii fig. 14, *Lochman & Hu*.

Unguliproctus see *Proctus*.

Vietnamia gen. n. [Synhomalonotinae] p. 43 for type *Calymene douvillei* Mansuy 1908 p. 44 pl. v figs. 4-5 text-fig. 2d Ordovician Viet Nam, *Kobayashi* Japan. J. Geol. Geogr. 31 1 1960.

Warburgaspis Pflügel 1946 considered nom. nud. p. 69, *Kielan* (1).

Waribole see *Cyrtosymbale*.

Weberides—range of mucronate and non-mucronate spp. p. 122, *W. mucronatus* (M'Coy), *W. m. traquairi* Reed, *W. parilis cuspidata* R., *W. aff. shunnerensis* (King), *W. sp.* listed p. 129, *Johnson*.

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Yabeia Resmer & Endo probably a synonym of *Metagraulos* p. 387, *Kobayashi* (4).

Yokusenina Kobayashi 1935—synonymy with *Lioparia* Lorenz 1906 reaffirmed p. 393, *Kobayashi* (4).

Yokuseninae replaced by *Liopariinae* subfam. n. p. 391, *Kobayashi* (4).

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Zbirovia longifrons (Olin 1906) restr. [? non pl. 3 fig. 16] holotype [sic] refigured p. 97 pl. xii figs. 1-5, *Kielan* (1).

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